

Estimating Supplies Program: Evaluation Report (U)



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Summary (U)

Background (U)

(U) To provide adequate patient care, Marine Corps units require estimates of the medical supplies required to treat a patient stream. Once patient supply requirements are projected, evaluating the readiness of a supply inventory helps assess the ability of that inventory to address these patient requirements. In response to these operational needs, the Naval Health Research Center developed the Estimating Supplies Program (ESP) as a decision tool for medical planners, providers, logisticians, and trainers that calculates the amount of supplies required to treat a specific patient stream and assesses inventory readiness.

Objective (U)

(U) The purpose of this document is to explain the program methodology, algorithms, and calculations that ESP uses to estimate medical supplies and evaluate inventory readiness.

Approach (U)

(U) To estimate supplies, the user enters level of care, functional area, the number and type of patients, and then runs a supply estimation report. ESP follows three steps: first, using the user's input, ESP determines which functional areas treat the patient. Second, ESP determines the percentage of patients with each specific patient condition (PC) who are treated at each functional area. Third, ESP uses an algorithm to calculate the supply items and their quantities.

(U) To evaluate an inventory, the user enters the supply blocks that are in the inventory and adjusts the on-hand and on-order supply quantities of each item. ESP assesses inventory readiness by calculating the S rating, the percentage of supplies on hand, for each supply block and the entire inventory.

Results (U)

(U) Sample reports for both the estimating supplies and the inventory readiness capabilities are included to provide a concrete demonstration of ESP capabilities. To demonstrate the estimating supplies capability, two different patient streams were run through the same functional area. A comparison of the supply differences was then drawn out to show an explicit connection to the difference in the patient streams.

(U) To demonstrate the inventory readiness assessment capability, an inventory was built. Certain supply item quantities were changed and a comparison was made between the S ratings.

Recommendations (U)

(U) To obtain optimal results from the ESP estimating supplies capability, follow the guidelines below:

- Select PC codes that are likely to reflect your expected patient stream.
- Select quantities of patients that are reasonable for your mission or exercise.
- Select functional areas that provide treatment for the patient stream you input. For example, if you select the Surgical Company Operating Room as your functional area but you input a patient stream that consists of disease PCs, the estimates will not be indicative of the supplies needed to actually treat those patients.

(U) It is also important to remember that ESP is *estimation* software. Keep in mind that the number and variety of patients will almost never be exactly what was used during planning. One way to plan for a certain number of unexpected patients is to use larger numbers of patients rather than a smaller number. This strategy ensures that a variety of supplies are represented in the ESP reports.

Estimating Supplies Program: Evaluation Report

Administrative Information (U)

(U) The Naval Health Research Center (NHRC) produced this document at the direction of OPNAV N931. Funding was provided by the Office of Naval Research and the Marine Corps Systems Command (MARCORSYSCOM). The NHRC research effort is sponsored by MARCORSYSCOM.

Introduction (U)

(U) Estimates of the medical supplies required to treat a patient stream are necessary for making decisions that adequately assess patient needs within the framework of a mission. Once patient needs are ascertained, evaluating the readiness of a supply inventory contributes information necessary to assess the ability of that inventory to address patient needs. The Estimating Supplies Program (ESP) answers these two operational needs for the Navy and the Marine Corps. ESP is a decision tool developed for medical planners, providers, logisticians, and trainers that calculates the amount of supplies required to treat a specific patient stream and assesses inventory readiness.

(U) The primary application of supply estimation is to determine logistical requirements for medical treatment. Traditionally, medical planners use a time-consuming process that is based on “pounds of supplies per patient.” Because this figure does not account for the specific type of patient, the traditional approach in estimating supplies is often imprecise. The ESP approach uses casualty estimates, treatment profiles, level of care, and functional area to generate the consumables and equipment necessary to treat a patient stream. ESP generates supply estimation reports that detail supply item, weight, cubic volume, and cost.

(U) The primary application of inventory readiness assessment is to determine if the available inventory meets expected medical needs and, if a significant lack is present, to provide justification for the procurement of assets so the unit can meet its mission goals. Presently, the U.S. military lacks a standard procedure for reporting medical readiness. The ESP approach uses supply item and supply quantity. ESP generates inventory readiness reports that indicate the percentage of supplies available for use, the operational condition of an inventory, and the materiel readiness of a unit.

(U) The purpose of this document is to explain how ESP works. The document includes sections on background, methodology, current uses, and continuing work. The methodology section includes a detailed description of the calculation procedures involved in estimating supplies and assessing inventory readiness.

Background (U)

(U) In response to the changing global military climate and the considerable advancements in technology, the U.S. Marine Corps prioritized the implementation of highly mobile medical units with improved responsiveness. The success of such units includes the development of more task-organized, flexible, and efficient medical supply configurations that match the speed and mobility of Marine Corps contingency response operations.

(U) To help the Navy and the Marine Corps meet their goals, NHRC designed a systematic process to review medical supplies by evaluating the clinical requirements for medical treatment at different areas of care. The review process (1) identified the medical tasks required to treat patients with specific injuries and illnesses, and (2) determined the consumable supplies and equipment required by each task.

(U) More than 130 subject matter experts (SMEs) reviewed treatment briefs, tasks, consumables, and equipment, and examined their usefulness to Navy and Marine Corps medical providers in forward areas of care. Substantial reductions (approximately 30%) in the number of items, weight, cube, and cost were achieved. By establishing the clinical requirement for each item pushed forward, the NHRC model reduced the logistical burden carried by Marine Corps units and enhanced far-forward clinical capability.¹⁻¹⁰ The NHRC review process produced a database that catalogs patient conditions (PCs) and the tasks and supplies required to treat them (See Appendix A for an example of a patient profile). This database, built into ESP, can be accessed to estimate supplies based on a given patient stream distribution.

(U) Version 1.00 of ESP was developed from this research to offer supply estimation capability. Version 2.00 was expanded to include the inventory readiness assessment.

Methodology of Supply Estimation Capability (U)

Approach (U)

(U) The supply estimation capability in ESP was designed for medical planners, providers, logisticians, and trainers for the primary purpose of generating the list of supplies needed to treat a user-defined patient stream.

(U) ESP works within the constraints of existing functional areas and their corresponding medical supply blocks. In other words, ESP calculates only the supplies that are authorized for each functional area. In addition, ESP is limited to the PCs that are identified by the Joint Readiness Clinical Advisory Board (JRCAB) and/or validated by the Navy and the Marine Corps. (As supply blocks, technology, war-fighting climates, and Marine Corps goals change, ESP's data can be updated.)

(U) ESP was developed using Microsoft Visual Studio 6.0. The tables, forms, libraries, reports, and queries were designed using Visual FoxPro (VFP) 6.0.

Data are stored in VFP tables and retrieved using VFP queries and reports. ESP provides utility to output data and reports to ASCII text files, Microsoft Word, Microsoft Excel, and HTML.

Overview of Supply Estimation Capability (U)

(U) To estimate supplies, the user establishes a patient stream by selecting a defined scenario, copying and modifying a scenario, building a new scenario, or importing a scenario from an outside data source (which may be provided in several different formats, such as an Excel spreadsheet or text file). In each method, the user identifies a patient stream consisting of the injuries and diseases most likely to occur in deployments and conflicts, and selects the level of care and functional areas expected to provide treatment. ESP uses these inputs to determine the tasks required to treat each patient and the supplies needed to perform each task. The results are produced as a report.

Data Sources (U)

(U) The data incorporated in ESP come from several sources. The supply block configurations in ESP are defined by MARCORSYSCOM and published on the Web by Naval Medical Logistics Command (NAVMEDLOGCOM). NHRC has worked with MARCORSYSCOM in reconfiguring the supply blocks by facilitating numerous reviews. NHRC has worked with the Navy and NAVMEDLOGCOM to develop fleet supply blocks.

(U) The levels of care and functional areas included in ESP are those defined by the Navy and the Marine Corps. The levels of care (with their corresponding functional areas) in ESP are:

- First Responder
 - Battalion Aid Station (BAS)
 - En Route Care System (ERCS) from BAS
 - Forward Resuscitative Surgery System (FRSS)
 - Pre-Op
 - Operating Room
 - Post-Op
 - ERCS from Post-Op
-

-
- Surgical Company
 - Triage/Shock Surgical Triage (SST)
 - ERCS from Triage
 - Operating Room
 - ERCS from Operating Room
 - Ward
 - X-ray
 - Laboratory
 - Pharmacy
 - Dental
 - Preventive Medicine
 - Small Ships/Independent Duty Corpsman
 - Sick Bay (including Preventive Medicine)
 - Laboratory
 - Battle Dressing Station
 - Portable Medical Locker
 - Antidote Locker
 - First-Aid Box
 - Emergency Response Kit (ERK)
 - Junior ERK
 - Landing Ship Dock/General Medical Officer
 - Sick Bay (including Preventive Medicine)
 - Laboratory
 - Battle Dressing Station
 - Portable Medical Locker
 - Antidote Locker
 - First-Aid Box
 - Emergency Response Kit (ERK)
 - Junior ERK
 - Operations Other Than War
 - Field
 - Clinic
 - Hospital

(U) The PCs included in ESP are a combination of PCs 1-350 defined by JRCAB and additional PCs defined by NHRC as a result of supply reviews, SME interviews and discussions, and research (see Appendix B for a list of PCs included in ESP).

(U) In addition, casualty rates from software programs, such as the FORECAS ground casualty forecasting system and the Patient Workload Generator (PATGEN), can be incorporated into ESP.

Calculation Procedure (U)

(U) After the user enters level of care, functional area, and the number and type of patients, the user runs a supply estimation report. ESP goes through three primary steps in estimating the supplies for a patient stream.

Step 1. ESP determines where the PCs are treated. (U)

(U) Because not all PCs are treated at every functional area, ESP checks which functional area treats the PCs entered by the user. For example, the Surgical Company Ward treats 119 of the 317 JRCAB PCs.

Step 2. ESP determines the number of patients with a PC treated at a specific functional area. (U)

(U) As noted in step 1, certain PCs are treated at certain functional areas; however, not all patients with a certain PC are treated at that area. For example, PC 14 (Wound Scalp Open Without Cerebral Injury or Skull Fracture Moderate – Scalp Laceration) is one of the 119 PCs treated at the Ward. However, the Ward is expected to treat only 65% of patients who sustain PC 14 during a mission. If 100 patients sustain PC 14, only 65 are treated at the Ward. Instead of calculating the supplies for the 100 casualties for the Ward, ESP calculates the supplies only for those 65 patients.

Step 3. ESP determines the supply items and their quantities. (U)

(U) After the number of patients is reduced by the appropriate percentage in step 1, ESP queries the tables to get a list of tasks needed to treat the PC and a list of supplies needed to complete each task. An algorithm is used to calculate the quantity of the supplies. For each task for each PC, sum the following:

(U)

Total quantity of supply for each PC for each task =

$[\text{number of patients} * (\text{Initial Use} * \text{IPTS}) * \text{quantity of supply}] + [\text{number of patients} * (\text{Recur} * \text{IPTS} * [(\text{ALOS}/24) - 1] * \text{quantity of supply}]$

(U) The first part of the equation calculates the quantity of supply needed to treat all patients with a particular PC at a particular functional area for the first 24 hours. The second part of the equation calculates the quantity of supply needed to provide recurring treatment (treatment beyond the initial 24 hours) for those same patients.

(U) Calculating the First 24 Hours. The following is a description of the calculations in the first part of the algorithm, which estimate the supplies needed for the first 24 hours of treatment.

(U)

Supply Qty for First 24 Hours = [number of patients * (Initial Use * IPTS) * quantity of supply]

(U) The terms in the algorithm are as follows:

- Number of patients is the number of patients with a specific PC at a specific functional area.
- Initial use is the number of times a task is performed in the first 24 hours.
- IPTS is the percentage of patients with a specific PC who require a specific task (and therefore require the supplies associated with that task). Although each PC has a list of tasks required for treatment, not all the patients with that PC need all the tasks. IPTS is used to determine how many times a specific task is performed.
- Quantity of supply is the amount of supply required to perform the task once (unit of measure).

(U) As an example, 65 patients with PC 14 are being treated at the Ward. Task 86 (Clean and Dress Wound) is required to treat PC 14 and plastic applicator supply [National Stock Number (NSN) 6515009051473] is required to complete task 86. The NHRC task profiles for PC 14 – task 86 indicate that:

- Initial use of the supply is 1.
- IPTS, the percentage of patients who require the supply, is 100%.
- Quantity of supply is 4.

(U) In the example above, the first part of the algorithm is:

(U)

$$\text{Supply Qty for First 24 Hours} = [65 * (1 * 1.00) * 4] = 260$$

(U) For 65 patients with PC 14, 260 applicators are needed to complete task 86 during the first 24 hours.

(U) Calculating the Recurring Treatment. The following is a description of the calculations in the second part of the algorithm, which estimate the supplies needed for the recurring treatment. Recurring treatment is care given after the first 24 hours.

(U)

$$\text{Supply Qty for Recur} = [\text{number of patients} * (\text{Recur} * \text{IPTS} * [(\text{ALOS}/24) - 1] * \text{quantity of supply}]$$

(U) The terms in the algorithm are as follows:

- Number of patients is the number of patients with a specific PC at a specific functional area.
- ALOS is the average length of stay measured in hours. ALOS is divided by 24 to determine how many days the patient requires treatment. One is subtracted to determine the number of days beyond the initial 24-hour period that the patient requires treatment.
- Recur is the number of times the task is repeated after the first 24 hours of treatment.
- IPTS is the percentage of patients with a specific PC who require a specific task.
- Quantity of supply is the amount of supply required to perform the task once.

(U) It is important to note that PCs with an ALOS less than 24 hours do not require recurring treatment. Therefore, when ALOS is less than 24 hours, ESP replaces $\text{ALOS}/24-1$ with a zero, making the second part of the algorithm zero.

(U) Continuing the example used in the previous section – 65 patients with PC14 being treated at the Ward – the NHRC task profiles for PC 14 – task 86 indicate that:

- Recur for the supply is 1.
- IPTS, the percentage of patients that require the supply, is 100%.
- ALOS is 48.
- Quantity of supply is 4.

(U) In the example above, the second part of the algorithm is:

(U)

$$\text{Supply Qty for Recur} = [65 * (1 * 1.00 * [(48/24) - 1] * 4)] = 260$$

(U) For 65 patients with PC 14, 260 applicators are needed to complete task 86 after the first 24 hours of treatment.

(U) The total quantity of supply required to provide treatment to 65 patients with PC 14 being treated at the Ward is:

(U)

$$\text{Total Qty of Supply for PC for a Task} = 260 + 260 = 520$$

Results (U)

(U) To demonstrate the ESP estimating supplies capability, two different patient streams were run through the same functional area, the Triage/SST in the Surgical Company. The first patient stream has only battle injuries (BIs) (see Table 1) and the second patient stream has only disease and nonbattle injuries (DNBIs) (see Table 2). The comparison focuses on consumable supplies because, unlike equipment that is reused, consumables are dependent on the patient stream.

Table 1. PCs in the BI Patient Stream. (U)

PC Code	PC Name	Number of Patients
005	Cerebral Contusion Closed With Intracranial Hematoma With/Without Non-Depressed Linear Skull Fracture – Severe – Large Hematoma (Including Epidural Hematoma) With Rapidly Deteriorating Comatose Patient	10
029	Fracture Spine Open With Cord Damage Cervical Spine With Respiratory Distress	10
093	Burn Thermal Partial Thickness Trunk Greater Than 10% but Less Than 20% of Total Body Area Involved	10
104	Wound Abdominal Cavity Open With Penetrating Perforating Abdominal Wound With Lacerated Liver	10
147	Amputation Above Knee Traumatic Complete	10
164	MIW Brain and Abdomen With Shock and Penetrating Perforating Wound Liver	10
171	MIW Chest With Pneumohemothorax and Limbs With Fracture and Vascular Injury	10
	Total	70

Table 2. PCs in the DNBI Patient Stream. (U)

PC Code	PC Name	Number of Patients
206	Cellulitis Involving Face or Weight Bearing Areas	10
216	Herpes Simplex and Zoster Without Encephalitis All Types of Viral Dermatitis	10
221	Conjunctivitis Severe – All Cases	10
230	Otitis Media Acute Suppurative Including Eustacian Tubes	10
240	Acute Respiratory Disease Moderate	10
245	Diarrheal Disease Severe	10
334	Febrile Illness Acute Moderate	10
	Total	70

(U) The consumable supplies required to treat the BI patient stream are listed in Figure 1, which begins on the next page. Figure 1 is part of the ESP Supplies for a Current Scenario report and spans pages 11-15. Figure 2 directly follows Figure 1 on page 16.

Supplies for Current Scenario

Battle Injury Patient Stream

Preventive Medicine not calculated. Output will appear as zero.

Surgical Company

Triage/SST

Nsn	Nomen	QtyUM	UM	QtyPkg	UI	ECD	Weight	Cube	Cost
Medication									
6505013809548	ADENOSINE INJ 3MG/ML 2ML SINGLE DOSE VIAL 10S	15.0	MG	1	PKG	M	0.100	0.004	130.59
6505001009985	ASPIRIN TABS .32GM 100S (ACLS protocol only)	1.0	TB	1	PKG	M	0.140	0.010	1.49
6505007542547	ATROPINE SULFATE INJ .4MG/ML 20ML VIAL	2.5	ML	1	PKG	M	0.140	0.005	6.00
6505005799110	BACITRACIN & POLYMYCIN OINTMENT	1.0	TU	1	TU	M	0.060	0.008	2.49
6505014802501	CEFAZOLIN INJECTION 1GM VIAL 25S	10.0	VI	1	PKG	M	0.180	0.210	43.64
6505012634531	CEFOXITIN SODIUM 2GM SINGLE DOSE VIAL 25S	16.0	VI	1	PKG	M	1.200	0.070	429.82
6505012192760	CEFTRIAXONE SODIUM 1GM VIAL 10S	12.0	GM	2	PKG	M	1.394	3.000	414.50
6505013366179	CIPROFLOXACIN INJ D5W 2MG/ML 200ML BAG 24S	10.0	EA	1	PKG	M	4.440	0.112	237.48
6505001375891	DIAZEPAM INJ 5MG/ML 2ML SYRINGE w/NDL 10S	40.0	EA	4	PKG	M	1.000	0.060	50.28
6505001487177	DIPHENHYDRAMINE HCL INJ 50MG/ML 1ML SYR 10S	40.0	EA	4	PKG	M	1.000	0.132	66.36
6505011231060	DOPAMINE HCL INJ 40MG/ML 10ML UNIT 10S	0.5	EA	1	PKG	M	0.410	0.026	89.96
6505010932384	EPINEPHRINE INJ 0.1MG/ML SYR/NDL 10ML 10S	1.0	EA	1	PKG	M	1.600	0.140	19.83
6505007341026	EPINEPHRINE INJ USP 1MG/ML 1ML AMPUL 10S	1.0	AM	1	PKG	M	0.250	0.012	8.51
6505011575117	FUROSEMIDE INJECTION 10MG/ML 2ML AMP 25S	41.0	AM	2	PKG	M	0.320	0.028	12.70
6505012139514	GENTAMICIN INJECTION 40MG/ML 2ML VI 25S	4.0	VI	1	PKG	M	0.660	0.020	7.09
6505001539740	HEPARIN SODIUM INJ 1000UNITS PER ML 10ML	5.0	ML	1	PKG	M	0.110	0.004	0.54
Found in Operating Room									
6505012811247	HESPERAN IN SODIUM CHLORIDE INJ 500ML BAG 12S	40.0	EA	4	PKG	M	64.000	2.000	1,180.56
6505014554200	LIDOCAINE & EPINEPHRINE INJ 1:100000 20 ML VI	100.0	ML	5	PKG	M	2.750	0.600	6.95
6505011947265	LIDOCAINE HCL 0.4% & D5W INJ 500ML BAG 18S	1.0	EA	1	PKG	M	24.500	0.870	139.13

Figure 1. Consumable Supplies for BI Patient Stream. (U)

Supplies for Current Scenario

Battle Injury Patient Stream

Preventive Medicine not calculated. Output will appear as zero.

Surgical Company

Triage/SST

Nsn	Nomen	QtyUM	UM	QtyPkg	UI	ECD	Weight	Cube	Cost
6505011561797	LIDOCAINE HCL INJ 1% 5ML 50MG SYR w/NDL 10S	1.5	EA	1	PKG	M	1.130	0.087	23.74
6505005986116	LIDOCAINE HCL INJ USP 1% 10MG/ML 50ML BT	50.0	ML	1	PKG	M	0.280	0.010	1.05
6505005843131	LIDOCAINE HYDROCHLORIDE JELLY USP 2% 30ML	35.5	ML	2	PKG	M	0.300	0.012	15.20
6505001538809	LUBRICANT SURGICAL 4OZ (113.4GM) TUBE	13.5	OZ	4	PKG	M	1.400	0.060	2.60
6505011253253	MANNITOL INJECTION 25% 250MG/ML 50ML VIAL 25S	60.0	VI	3	PKG	M	20.250	0.546	77.40
6505008556984	MEPERIDINE HCL INJ 100MG/ML 1ML CART-NDL 10S	70.0	EA	7	PKG	M	1.890	0.056	48.79
6505011080808	METHYLPREDNISOLONE SODIUM SUCC INJ 1000MG	20.0	VI	20	VI	M	2.400	0.080	104.00
6505013092742	METOPROLOL TARTRATE INJ 1MG/ML 5ML AMPS 12S	7.5	MG	1	PKG	M	0.550	0.011	47.71
6505012395492	MIDAZOLAM HCL INJECTION 5MG/ML 10ML VI 10S	77.5	ML	1	PKG	M	0.580	0.026	67.51
6505001490113	MORPHINE SULF INJ 10MG 1ML CART-NDL 10S	60.5	EA	7	PKG	M	1.960	0.070	56.49
6505000797867	NALOXONE HCL INJ USP .4MG/ML 1ML AMP 10S	0.5	AM	1	PKG	M	0.120	0.050	4.85
6505012463781	NITROGLYCERIN LINGUAL AEROSOL .4MG 200 DOSES	1.5	DO	1	PKG	M	0.080	0.003	48.05
6505010083401	NITROGLYCERIN OINTMENT 2% 60GM TUBE	2.5	GM	1	PKG	M	0.260	0.011	4.47
6505001325181	OXYGEN USP 99% CYLINDER TY-D 95GL	19.5	EA	20	EA	M	260.000	6.000	3,737.40
6505013329024	PHENYTOIN SODIUM INJ 50MG/ML 5ML VI 25S	40.0	VI	2	PKG	M	2.000	0.020	8.72
6505004917557	POVIDONE-IODINE CLEANSING SOL 7.5% 118ML	129.5	ML	2	PKG	M	0.820	0.032	2.00
6505007540374	POVIDONE-IODINE TOPICAL SOLUTION 1% 1GL	65.0	OZ	1	PKG	M	10.000	0.300	8.18
6505002998614	PROCAINAMIDE HCL INJ 100MG/ML 10ML VI	5.0	ML	1	PKG	M	0.150	0.010	0.47
6505006807352	PROMETHAZINE HCL INJ 25MG/ML 1M AMP 25S	10.0	AM	1	PKG	M	0.310	0.019	9.70
6505014623025	RINGER'S INJECTION LACTATED 1000ML BAG 12S	70.0	EA	6	PKG	M	1.500	0.072	67.26
6505002165370	SODIUM BICARB 8.4% SYR/NDL 1mEq/ML 50ML 10S	1.0	EA	1	PKG	M	4.400	0.300	18.24
6505014622436	SODIUM CHLORIDE INJECTION 0.9% 1000ML BAG 12S	50.0	EA	5	PKG	M	2.750	0.600	84.10
Found in Operating Room									
6505013308925	SODIUM CHLORIDE INJECTION 0.9% 50ML BAG 84S	41.0	EA	1	PKG	M	3.150	0.077	58.52
6505014624194	SODIUM CHLORIDE IRRIGATION 0.9% 1000ML BT 12S	15.0	BT	2	PKG	M	16.700	0.230	45.04
6505014716410	SUCCINYLCHOLINE CHLORIDE 100MG/ML 10MLVI 25S	3,000.0	MG	3	PKG	M	3.750	1.050	208.26
6505005607331	SULFADIAZINE SILVER CREAM 1% TOP 400GM JR	4,000.0	GM	10	PKG	M	12.500	0.470	145.40
6505012580983	VECURIUM BROMIDE INJ 10MG/ML 10ML VI 10S	45.0	MG	5	PKG	M	2.250	0.150	713.65
6505012663771	VERAPAMIL HCL INJ 2.5MG/ML 4ML SYR 10S	2.0	EA	1	PKG	M	0.060	0.068	22.62
Subtotal for Medication							455.794	17.731	8,479.34

Figure 1 (cont). Consumable Supplies for BI Patient Stream. (U)

Supplies for Current Scenario

Battle Injury Patient Stream

Preventive Medicine not calculated. Output will appear as zero.

Surgical Company

Triage/SST

Nsn	Nomen	QtyUM	UM	QtyPkg	UI	ECD	Weight	Cube	Cost
Consumable									
6515010701497	ADAPTER INJECTION SITE SODIUM LOCK	15.0	EA	1	PKG	C	3.000	0.470	79.96
Found in Ward									
6515013215211	AIRWAY KIT PERCUTANEOUS EMERGENCY ADULT 1s	5.0	EA	5	EA	C	1.000	0.250	1,369.80
6515011676637	AIRWAY NASOPHARYNGEAL ROBERTAZZI 30FR 12s	2.0	EA	1	PKG	C	3.000	0.200	59.23
6515011649637	AIRWAY PHARYNGEAL CUT AWAY FLANGE 30FR 30s	18.0	EA	1	PKG	C	1.000	0.010	68.43
6510001055807	BANDAGE ELASTIC COBAN FLESH 3" X 5YD 24s	8.5	RL	1	PKG	C	6.940	0.131	73.01
6510009355822	BANDAGE ELASTIC ROLLED ACE 4INx4.5YDS 12s	11.0	RL	1	PKG	C	2.000	0.183	9.94
6510009355823	BANDAGE ELASTIC ROLLED ACE 6INx4.5YDS 12s	12.5	RL	2	PKG	C	6.500	0.568	42.30
6510000583047	BANDAGE GAUZE KERLIX 4.5INS x 4YDS 100s	216.0	RL	3	PKG	C	3.450	0.078	295.65
PN: 4418-02	BASIN EMESIS PLAS DISP 500CC 24s	11.5	EA	1	PKG	C	0.040	0.100	9.50
6515006600011	BLADE SURGICAL KNIFE DETACHABLE #10 6s	15.5	EA	3	PKG	C	0.090	0.006	6.84
6515010095293	BLADE SURGICAL KNIFE DETACHABLE #15 150s	5.5	EA	1	PKG	C	1.120	0.045	32.04
7210009356665	BLANKET CASUALTY 84x56IN PLAST SOLID TAPD	60.0	EA	60	EA	C	46.200	4.200	620.40
XXXXXXXXXX14	BLOOD PACKED RBCs 1 UNIT	40.0	EA	40	EA	C	0.000	0.000	0.00
6515011281407	BLOOD RECIPIENT SET TRANSFUSION 48s	40.0	EA	1	PKG	C	8.000	1.400	233.93
Found in Operating Room									
6530013643353	BRUSH-SPONGE SURG SCRUB NONSTER 3% PCMX 300s	11.0	EA	1	PKG	C	5.000	0.175	153.72
6515010726380	CANNULA LARYN YANKAURER DSGN 72IN LG 20s	40.0	EA	2	PKG	C	0.860	0.062	189.12
PN: M3586A	CARTRIDGE ANALYZER BLOOD CC COMBO 25s	105.0	EA	5	PKG	C	1.250	0.225	375.00
6515014661488	CARTRIDGE PUMP INTRAVENOUS POWER INFUSOR 10s	40.0	EA	4	PKG	C	8.000	0.800	1,180.00
6515013909627	CATHETER & NEEDLE UNIT IV 14Gx1.25IN 200s	74.5	EA	1	PKG	C	5.700	0.032	471.04
6515013909654	CATHETER & NEEDLE UNIT IV 18Gx1.25IN 200s	35.0	EA	1	PKG	C	22.500	0.143	393.63
6515013909650	CATHETER & NEEDLE UNIT IV 20Gx1.25IN 200s	6.0	EA	1	PKG	C	23.100	0.143	493.00
6515001490104	CATHETERIZATION KIT URETHRAL 16FR DISP	45.0	EA	45	EA	C	31.950	11.430	427.50
7920011263250	CLOTH CLEANING WHITE 15x12" 900s	224.0	EA	1	PKG	C	0.050	0.004	82.50
6515007257843	CONNECTOR TUBING BRANCHED 50s	10.0	EA	1	PKG	C	0.260	0.032	53.88
Found in Operating Room									
6515009269201	CONNECTOR TUBING STRAIGHT 50s	79.0	EA	2	PKG	C	1.300	0.120	36.92
Found in Operating Room									
4020011111766	CORD TRACTION BRAIDED .1875IN #6	24.0	FT	1	PKG	C	0.500	0.042	6.15
XXXXXXXXXX18	COVER WARMING BLANKET DISP 1s	32.5	EA	33	EA	C	0.000	0.000	0.00
XXXXXXXXXX2	DEPLOY PACK DEFIB ZOLL PADS ELECTRODES 4 SETS	0.5	EA	1	EA	C	0.000	0.000	0.00
6515003245500	DEPRESSOR TONGUE WOOD 6x.75IN STR 100s	30.0	EA	1	PKG	C	0.690	0.036	2.91
Found in Operating Room									

Figure 1 (cont). Consumable Supplies for BI Patient Stream. (U)

Supplies for Current Scenario

Battle Injury Patient Stream

Preventive Medicine not calculated. Output will appear as zero.

Surgical Company

Triage/SST

Nsn	Nomen	QtyUM	UM	QtyPkg	UI	ECD	Weight	Cube	Cost
6640011079169	DETERGENT GLASSWARE & INSTRUMENTS ALCONOX 4LB	35.5	OZ	1	PKG	C	4.000	0.001	17.67
6510014575844	DRESSING BURN 8x18IN w/WATER-GEL 20S	10.0	EA	1	PKG	C	0.550	0.120	103.00
6510014081920	DRESSING CHEST WOUND SEAL ASHERMAN 10S	10.0	EA	1	PKG	C	1.550	0.012	100.71
6510002017430	DRESSING FIRST AID FIELD CAMO 7x8IN 1S	80.0	EA	80	EA	C	23.200	1.360	464.80
6510000835573	DRESSING FIRST AID FIELD WHITE 4x6IN PLEATED	100.0	EA	100	EA	C	14.000	0.600	330.00
6515011535752	ELECTRODE EKG PREGELLED 4.4CM DIA 25S	120.0	EA	5	PKG	C	15.000	1.150	157.80
6515013773836	EXTENSION SET IV 30IN w/ROLLER CLAMP 48S	40.0	EA	1	PKG	C	0.027	0.027	68.52
6515013750513	FILTER HEAT & MOISTURE EXCHANGE ANES/VENT 50S	49.0	EA	1	PKG	C	0.300	0.200	274.39
7540006344121	FORM PRINTED CLINIC RECORD DOC 10.5x8" 100S	70.0	EA	1	PKG	C	0.010	0.001	5.51
Found in Ward									
7540006344122	FORM PRINTED CLINICAL DOCTOR'S NOTES 100S	70.0	EA	1	PKG	C	0.010	0.001	3.54
XXXXXXXXXX20	FORM PRINTED RESUSCITATION TRAUMA 4-PAGES	70.0	EA	70	EA	C	0.000	0.000	0.00
6510002020800	GAUZE PETROLATUM ACCORDION 18x3IN 12S	10.0	EA	1	PKG	C	0.440	0.024	8.54
6515013648554	GLOVE PATIENT EXAM/TREAT LGE PREPWDR 100S	21.0	EA	1	PKG	C	1.200	0.100	11.77
6515013648553	GLOVE PATIENT EXAM/TREAT MED PREPWDR 100S	39.0	EA	1	PKG	C	1.200	0.100	10.73
6515011498839	GLOVES SURG GEN SURG SZ 6.5 PWDR-FREE 50PR	4.0	PR	1	PKG	C	4.560	0.475	161.63
6515011498841	GLOVES SURG GEN SURG SZ 7.5 PWDR-FREE 50PR	13.3	PR	1	PKG	C	4.560	0.475	37.42
6515011498842	GLOVES SURG GEN SURG SZ 8 RUBBER 50PR	9.3	PR	1	PKG	C	4.560	0.475	36.73
PN: RC-09700	INTRAVENOUS EXCHANGE SET 7.0FR 2.0IN LG 25S	40.0	EA	2	PKG	C	4.000	0.060	490.00
6515012767970	INTRAVENOUS EXCHANGE SET 8.5FR 2.5IN LG 25S	40.0	EA	2	PKG	C	4.000	0.060	490.00
6515011050614	IV INJ SET MACRODRIP 15 DROPS/ML 50S	170.0	EA	4	PKG	C	0.512	0.112	321.32
8405008893683	LINER PONCHO (TRI-SERVICE APPROVED BLANKET)	60.0	EA	60	EA	C	30.000	0.900	1,584.00
6515013716467	MASK OXYGEN ORONASAL NON-REBREATHING 50S	39.0	EA	1	PKG	C	9.700	1.700	59.29
6515007822621	MASK SURGICAL NONWOVEN FABRIC DISP 50S	26.5	EA	1	PKG	C	1.250	0.213	8.86
Found in Operating Room									
6515007542834	NEEDLE HYPO GP 18GA 1.5IN LG LUER LOCK 100S	20.0	EA	1	PKG	C	0.660	0.044	6.63
6515011727650	NEEDLE HYPO GP 22GA 1.5IN LG LUER LOCK 100S	80.5	EA	1	PKG	C	0.480	0.500	4.36
6510007755706	PAD ABDOMINAL 7.5 X 8" WHITE 3 LAYERS 240S	20.0	EA	1	PKG	C	15.000	3.195	44.48
6510007863736	PAD PREP ISOPROPYL ALCOHOL IMPREG 1x2.5IN 100	550.5	EA	6	PKG	C	3.000	0.600	10.38
6515014594403	PADS DEFIBRILLATION 2-PACK	0.5	SE	1	PKG	C	3.250	1.150	44.00
PN: S-100	PLEUREVAC DRAINAGE AUTO TRANSFUSION BAG 1S	10.0	EA	11	EA	C	2.750	1.100	291.50
PN: S-1100B	PLEUREVAC DRAINAGE UNIT w/BLOOD RETREIVAL 1S	10.0	EA	11	EA	C	12.100	2.750	962.50
6515013225898	RAZOR SURGICAL PREPARATION PLAS DISP 100S	30.5	EA	1	PKG	C	0.010	0.001	27.54
6515014941951	SPLINT UNIV ALUM 4IN WI x 36IN LG 1S	20.0	EA	20	EA	C	4.400	1.600	200.00

Figure 1 (cont). Consumable Supplies for BI Patient Stream. (U)

Supplies for Current Scenario

Battle Injury Patient Stream

Preventive Medicine not calculated. Output will appear as zero.

Surgical Company

Triage/SST

Nsn	Nomen	QtyUM	UM	QtyPkg	UI	ECD	Weight	Cube	Cost
6510007822699	SPONGE SURG 12-PLY GAUZE 8x4IN NONSTER 200S	100.0	EA	1	PKG	C	2.400	0.205	22.31
6510007822698	SPONGE SURG 8-PLY GAUZE WHITE 4x4IN 200S	815.0	EA	5	PKG	C	4.150	0.365	18.00
6510007219808	SPONGE SURG COTTON GAUZE 4x4IN STERILE 1200S	430.0	EA	1	PKG	C	16.000	2.200	93.04
Found in Ward									
6515010715561	STAPLER SKIN SURG DISP 6.9x3.9MM STAPLES 6S	0.2	EA	1	PKG	C	1.200	0.096	125.20
6515011676666	SUCTION SET TRACHEAL 14FR x22 PLAS 100S	40.0	EA	1	PKG	C	4.000	0.100	56.00
6515014663004	SUPPORT CERVICAL COLLAR ADJ SIZES 1-16 30S	27.5	EA	1	PKG	C	0.650	0.015	363.60
6530013080984	SURGICAL PACK DISP WET SKIN SCRUB PACKS 20S	20.0	EA	1	PKG	C	6.800	0.002	62.40
6515012317236	SUTURE ABS GI SZ 4-0 COATED VICRYL 3S	1.0	EA	1	PKG	C	0.480	0.063	78.10
6515011535733	SUTURE NONABS GEN CLO SZ 1 MONO PLAS 12S	11.0	EA	1	PKG	C	0.780	0.063	35.58
6515007344342	SUTURE NONABS SZ 4-0 NYLON CUTTING NDL 36S	1.0	EA	1	PKG	C	0.730	0.041	120.43
6515014587025	SYRINGE & NEEDLE VANISH-POINT 10CC 21GA 100S	158.0	EA	2	PKG	C	0.700	0.220	80.00
6515007540412	SYRINGE HYPO GP 10ML CAP LUER SLIP 100S	30.0	EA	1	PKG	C	5.800	0.570	18.99
6515014123101	SYRINGE HYPODERMIC 20ML 40S	83.0	EA	4	PKG	C	4.800	0.044	31.44
6515014570288	SYRINGE IRRIGATING 60ML LUER PLAS DISP 120S	20.0	EA	1	PKG	C	1.250	0.250	101.00
8465013376792	TAG TRIAGE CARDBOARD 200S	70.0	EA	1	PKG	C	0.200	0.400	38.98
6510009268882	TAPE ADHESIVE SURG WOVEN 1INx12YD 12S	13.2	RL	2	PKG	C	2.820	0.100	29.58
6510009268884	TAPE ADHESIVE SURG WOVEN 3INx10YD 4S	2.0	RL	1	PKG	C	1.200	0.050	19.29
6530012422337	TAPE SEALING STERILIZATION 1x2160IN 9S	252.0	IN	1	PKG	C	4.300	0.200	18.86
Found in Operating Room									
6530001101854	TOWEL PACK SURG BLUE/GREEN STERILE DISP 96S	21.5	EA	1	PKG	C	9.000	0.900	121.57
Found in Operating Room									
6515011885316	TUBE DRAINAGE SURG PENROSE 1X18IN 200S	11.0	EA	1	PKG	C	3.440	0.019	69.44
6515008669073	TUBE DRAINAGE SURG THORACIC 36FR STR 10S	10.0	EA	1	PKG	C	1.540	0.096	17.14
6515010369034	TUBE ENDOTRACHEAL MURPHY 7.5MM 10S	19.5	EA	2	PKG	C	2.400	0.520	45.90
6515001050759	TUBE ENDOTRACHEAL MURPHY 8.0MM OD 10S	10.5	EA	2	PKG	C	2.000	0.100	65.94
6515001490316	TUBE STOMACH SURGICAL PLASTIC SALEM 50S	45.0	EA	1	PKG	C	4.000	0.700	184.33
6530010491830	WRAPPER STERILIZ BLUE 36x36IN POLYPRO 300S	42.0	EA	1	PKG	C	26.500	3.375	95.37
Subtotal for Consumable							456.919	50.685	15,016.51

Figure 1 (cont). Consumable Supplies for BI Patient Stream. (U)

Supplies for Current Scenario
Disease/Nonbattle Injury Patient Stream

Preventive Medicine not calculated. Output will appear as zero.

Surgical Company

Triage/SST

Nsn	Nomen	QtyUM	UM	QtyPkg	UI	ECD	Weight	Cube	Cost
Medication									
6505014802501	CEFAZOLIN INJECTION 1GM VIAL 25s	10.0	VI	1	PKG	M	0.180	0.210	43.64
6505011591493	FLUORESCCEIN SODIUM OPTHALMIC STRIPS 300s	30.0	EA	1	PKG	M	0.150	0.017	152.56
6505010222646	GENTAMICIN SULF OPTH SOL 3MG/ML 5ML	5.0	ML	1	PKG	M	0.050	0.005	2.10
6505014623025	RINGER'S INJECTION LACTATED 1000ML BAG 12s	7.5	EA	1	PKG	M	0.250	0.012	11.21
6505013308925	SODIUM CHLORIDE INJECTION 0.9% 50ML BAG 84s	10.0	EA	1	PKG	M	3.150	0.077	58.52
6505014624194	SODIUM CHLORIDE IRRIGATION 0.9% 1000ML BT 12s	13.0	BT	2	PKG	M	16.700	0.230	45.04
6505001394600	TETRAHYDROZOLINE OPTHALMIC SOL .05% 15ML	5.0	ML	1	PKG	M	0.070	0.004	1.75
Found in Pharmacy									
Subtotal for Medication							20.550	0.555	314.82
Consumable									
6515010701497	ADAPTER INJECTION SITE SODIUM LOCK	15.0	EA	1	PKG	C	3.000	0.470	79.96
Found in Ward									
PN: 4418-02	BASIN EMESIS PLAS DISP 500CC 24s	6.0	EA	1	PKG	C	0.040	0.100	9.50
PN: M3586A	CARTRIDGE ANALYZER BLOOD CC COMBO 25s	17.5	EA	1	PKG	C	0.250	0.045	75.00
6515013909654	CATHETER & NEEDLE UNIT IV 18GAx1.25IN 200s	3.8	EA	1	PKG	C	22.500	0.143	393.63
6515013909650	CATHETER & NEEDLE UNIT IV 20GAx1.25IN 200s	3.8	EA	1	PKG	C	23.100	0.143	493.00
7920011263250	CLOTH CLEANING WHITE 15X12" 900s	80.0	EA	1	PKG	C	0.050	0.004	82.50
4020011111766	CORD TRACTION BRAIDED .1875IN #6	1.5	FT	1	PKG	C	0.500	0.042	6.15
7540006344121	FORM PRINTED CLINIC RECORD DOC 10.5x8" 100s	70.0	EA	1	PKG	C	0.010	0.001	5.51
Found in Ward									
7540006344122	FORM PRINTED CLINICAL DOCTOR'S NOTES 100s	76.9	EA	1	PKG	C	0.010	0.001	3.54
XXXXXXXXXX20	FORM PRINTED RESUSCITATION TRAUMA 4-PAGES	70.0	EA	70	EA	C	0.000	0.000	0.00
6515013648554	GLOVE PATIENT EXAM/TREAT LGE PREPWDR 100s	7.0	EA	1	PKG	C	1.200	0.100	11.77
6515013648553	GLOVE PATIENT EXAM/TREAT MED PREPWDR 100s	13.0	EA	1	PKG	C	1.200	0.100	10.73
6515011050614	IV INJ SET MACRODRIP 15 DROPS/ML 50s	7.5	EA	1	PKG	C	0.128	0.028	80.33
6510007863736	PAD PREP ISOPROPYL ALCOHOL IMPREG 1x2.5IN 100	17.5	EA	1	PKG	C	0.500	0.100	1.73
6515012538165	SHIELD EYE SURG GOFFMAN 50s	15.0	EA	1	PKG	C	0.400	0.010	53.50
6510007822698	SPONGE SURG 8-PLY GAUZE WHITE 4x4IN 200s	160.0	EA	1	PKG	C	0.830	0.073	3.60
6515014587025	SYRINGE & NEEDLE VANISH-POINT 10CC 21GA 100s	10.0	EA	1	PKG	C	0.350	0.110	40.00
6515014570288	SYRINGE IRRIGATING 60ML LUER PLAS DISP 120s	6.0	EA	1	PKG	C	1.250	0.250	101.00
6510009268882	TAPE ADHESIVE SURG WOVEN 1INx12YD 12s	1.4	RL	1	PKG	C	1.410	0.050	14.79
Subtotal for Consumable							56.728	1.770	1,466.24

Figure 2. Consumable Supplies for DNBI Patient Stream. (U)

(U) Comparing the two figures highlights the ESP ability to estimate the supplies for a particular patient stream. It is important to keep in mind the mission of the Triage/SST, which is treating the patients in the above example. The Triage/SST provides receipt, resuscitation, and sorting of casualties and treats casualties with battle injuries, nonbattle injuries, and those who can return to duty within 72 hours. The Triage/SST renders general surgical support and preoperative clinical functions. Below is a comparison of the number, types, quantity, and total weight and cube of medications in Figures 1 and 2.

(U) Number of Supply Items. For a specific example, look at the medication sections in both Figures 1 and 2. The BI patient stream requires 47 medications and the DNBI patient stream requires 7.

(U) Types of Supply Items. Of the types of medications required by the patient streams, only four are common to both streams:

- Cefazolin Injection 1GM Vial 25S
- Ringer's Injection Lactated 1000ML Bag 12S
- Sodium Chloride Injection 0.9% 50ML Bag 84S
- Sodium Chloride Irrigation 0.9% 1000ML BT 12S

(U) Quantity of Supply Items. Of the four items in common in both lists, only one requires the same quantity to treat the patients; both patient streams require 10 vials of Cefazolin Injection 1GM Vial 25S. The required amounts of the other three medications are listed in Table 3.

Table 3. Quantities of Medications Common to Both Patient Streams. (U)

Supply	Quantity	
	BI	DNBI
Ringer's Injection Lactated 1000ML Bag 12S	70 each	7.5 each
Sodium Chloride Injection 0.9% 50ML Bag 84S	41 each	10 each
Sodium Chloride Irrigation 0.9% 1000ML BT 12S	15 bottles	13 bottles

(U) Total Weight and Cube. The BI patient stream requires more medications and more quantities of those medications. Therefore, the total weight and cube of medications is much higher for the BI patient stream than the DNBI patient stream (see Table 4).

Table 4. Comparison of Weight and Cube of Medications. (U)

	BI	DNBI
Weight (lbs)	455.794	20.550
Cube (feet)	17.731	.555

Methodology of Inventory Readiness Assessment Capability (U)

Approach (U)

(U) The inventory readiness assessment capability in ESP was designed for medical planners, providers, logisticians, and trainers for the primary purpose of calculating the percentage of supplies on-hand, the operational condition of the supplies, and the materiel readiness of a unit.

Overview of Inventory Readiness Assessment Capability (U)

(U) To assess inventory readiness, the user establishes an inventory by selecting a defined inventory, copying and modifying an inventory, creating a new inventory, or importing an inventory from an outside source. In each method, the user identifies the supply blocks in the inventory, then adjusts the on-hand and on-order quantities of each supply item contained in the supply blocks. On-hand quantity indicates the amount of a supply that is available for immediate use; it is physically contained in the inventory. On-order quantity indicates the supplies that the supply block requires but are missing from the inventory. ESP uses these inputs to calculate the S rating for individual supply blocks, an entire inventory, and the JRCAB risk items, to determine the supplies missing from the inventory, and to identify the PCs and tasks that require the missing items. The results are produced in the form of a report.

Data Sources (U)

(U) As previously mentioned, ESP uses the supply blocks approved by MARCORSYSCOM and posted on the Web by NAVMEDLOGCOM, and the levels of care and functional areas defined by the Marine Corps (see page 4).

(U) The formula used to calculate the S rating was adapted from the SRE ratings employed by the Marine Corps Ground Equipment Resource Reporting system (MCGERR). MCGERR reports nonmedical equipment readiness and uses SRE ratings to indicate equipment resource status (see instruction MCO 3000.11C for more information on SRE ratings). The closer the SRE ratings are to 1.00, the better equipped the inventory.

(U) ESP utilizes the MCGERR S rating in a slightly different way. MCGERR calculates the S rating for non-medical equipment, while ESP calculates the S rating for medical equipment and consumable items. In addition, for the MCGERR R and E to be calculated, they require the number of deadlined items, which are those items in the inventory but unavailable for use for any reason, such as missing or broken parts. ESP does not calculate R and E ratings because the medical system does not track deadlined items. However, ESP does track on-order items, those items missing from the inventory but required by the supply block. On-order items differ from deadlined items because on-order items are not part of the inventory and therefore do not affect the operational condition of the supplies already on hand.

(U) In addition, ESP has incorporated JRCAB risk codes, which are ratings assigned to each individual supply to indicate how important it is to treating the patient. JRCAB risk codes range from 1A to 4 and are summarized below:

- **1A:** Essential medical materiel required upon the clinician's arrival
 - **1B:** Materiel essential to the mission but can be acquired during second Time-Phased Force Deployment Document process.
-

- **2:** Items not initially required but if unavailable may increase morbidity and time of patient recovery.
- **3:** Items required for expanded care.
- **4:** Items required in communication zone, the continental United States, or outside the continental United States.

Calculation Procedure (U)

(U) The user first identifies the supply blocks to include in the inventory. Once the supply blocks are selected, the user adjusts the on-hand and on-order quantities of each supply contained in each supply block in their inventory. As the user adjusts the supply quantities, ESP calculates the SRE ratings for each supply block and across the entire inventory. This information is displayed on the screens within the program. SRE ratings for JRCAB risk items are calculated when the output reports are run. The quantities above are determined by summing the individual item quantities for a given functional area using Structured Query Language (SQL).

(U) The S rating is calculated for each individual supply block and for the entire inventory. For the following discussion, refer to the example below:

- Supply A: 5 required by the block, 2 on hand, 3 on order
- Supply B: 7 required by the block, 5 on hand, 2 on order
- Supply C: 9 required by the block, 7 on hand, 2 on order

(U) The S rating is the percentage of consumables and equipment on hand, which indicates the attainment level of the inventory.

(U)

$$S = \frac{\sum \text{on-hand quantity}}{\sum \text{Supply block quantity}} \quad .666 = \frac{2 + 5 + 7}{5 + 7 + 9}$$

(U) Supply block quantity in the equation above is the quantity of a particular supply authorized in the block. The supply block in this example authorizes 5 of Supply A, but only 2 are actually on hand; 7 of Supply B, but only 5 are on

hand; and 9 of Supply C, but only 7 are on hand. The inventory for that supply block contains 66.6 % of the supplies required by the supply block. The S rating is .666.

Results (U)

(U) Figures 3 and 4 demonstrate the ESP ability to calculate the S rating for an individual supply block and an entire inventory. Figure 3 (pages 21-25) lists the items in an inventory, while Figure 4 shows the same inventory after some supply quantities have been decreased. Each figure is a report from ESP.

(U) The title pages of the reports in each figure show the S ratings for the overall inventory, for each block, and for the JRCAB risk items. The remaining pages list the supply items within each block. The Authorized Medical Allowance List (AMAL) column shows the quantity (in unit of issue) of the supply required by the selected supply block, the On Hand column reflects the quantity currently in the inventory, and the delta column shows the difference between the AMAL column and the On Hand column.



Report: Supplies for a Selected Inventory

Date: 10/31/02

Inventory: SST supplies

S

Attainment: 0.9688

Inventory Analysis	Total Items and JRCAB Risk Code 1A/1B Items
AMAL Block Description	S Risk S
0631 001 SST/Triage Equipment	0.9734 0.9734
0632 001 SST/Triage Consumables	0.9632 0.9632

Figure 3. Sample Supplies for Selected Inventory Report Before Changes. (U)

AMAL:0631 SST/Triage Equipment		Attainment Rating S 0.9734		
AMAL:0631	Block: 001	Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6530007710105	BASIN WASH CORROSION RESISITING STEEL 7QT	8.0	6.0	-2.0
6530014212971	BASKET STERILIZATION SURG INSTR 9x5x2IN	16.0	12.0	-4.0
6515014947971	BATTERY PACK DEFIB AED u/w 6515014794272 1S	2.0	2.0	0.0
6530007717025	BEDPAN OVAL 11 x14 x 4IN STEEL	2.0	0.0	-2.0
6515003634150	BLADE FINGER RING SAW STEEL CARBON 1S	2.0	2.0	0.0
6515014604672	BLADE LARYNGOSCOPE MACINTOSH NO. 4 PLAS	4.0	4.0	0.0
6515014604725	BLADE LARYNGOSCOPE MILLER 2 RUGGED PLAS	4.0	4.0	0.0
6515014604681	BLADE LARYNGOSCOPE ADULT MILLER #3 PLAS	3.0	2.0	-1.0
7530002223527	BOOK RECORD 14x8.5IN 288 PAGES	2.0	1.0	-1.0
6530007720326	BOWL SURGICAL SPONGE STEEL 3IN DEEP 6IN DIA	8.0	8.0	0.0
6530014210847	CASE STERILIZATION 10x7IN RIGID MINI-SIZE	16.0	16.0	0.0
6515014794272	DEFIB-MONITOR AUTO EXTERNAL w/OVERRIDE	1.0	1.0	0.0
6515003344900	FORCEPS HEMO HALSTED MOSQUITO PT 5IN CURVE	32.0	32.0	0.0
6515003343800	FORCEPS HEMO KELLY 5.25-5.75" LG SLIGHT CURVE	36.0	36.0	0.0
6515003349500	FORCEPS HEMO PEAN 9IN SLIGHTLY CURVED	32.0	32.0	0.0
6515003345600	FORCEPS HEMOSTAT HALSTED MOSQUITO PT 5IN LG	32.0	32.0	0.0
6515003347400	FORCEPS HEMOSTAT ROCHESTER-OCHSNER 6IN	32.0	32.0	0.0
6515003346800	FORCEPS HEMOSTATIC KELLY 5.5IN STRAIGHT	32.0	32.0	0.0
6515003377800	FORCEPS TISSUE ADSON 4.50IN TWEEZER	32.0	32.0	0.0
6515003380300	FORCEPS TISSUE ALLIS 6IN PIVOTED STR & SMOOTH	32.0	32.0	0.0
6515003204590	FORCEPS TOWEL BACKHAUS 4IN OPPOSED PRONGS	64.0	60.0	-4.0
6540012901157	GOGGLES PROTECTIVE DISTORT-FREE LENSES 100S	0.1	0.1	0.0
6515003447800	HANDLE SURG KNIFE BLADE SZ 3 NARROW NOSE	32.0	28.0	-4.0
6515003417200	HOLDER SUTURE NEEDLE COLLIER 5IN STRAIGHT	16.0	16.0	0.0
6515002998737	HOLDER SUTURE NEEDLE HEGAR-MAYO 7IN	16.0	16.0	0.0
6515006198219	HOLDER SUTURE NEEDLE WEBSTER STR 5IN	16.0	14.0	-2.0
6515013448487	INJECTOR TUBE REUSABLE 1ML & 2ML NDL UNITS	4.0	4.0	0.0
6515014553888	LANTERN ELECTRIC HEAD MOUNT HALO/KRYPTON	30.0	30.0	0.0
6515014509790	LARYNGOSCOPE SET SOFTCASE w/LIGHT BLADES	4.0	4.0	0.0
6540014553885	LENS COVER RED LANTERN ELECTRIC HEAD MOUNT	30.0	30.0	0.0
6530013168733	LIGHT SURGICAL FIELD 110 VOLT AC OR 24 VOLT	4.0	4.0	0.0
8405008893683	LINER PONCHO (TRI-SERVICE APPROVED BLANKET)	12.0	12.0	0.0
6530014325114	LITTER RIGID FOLDING RAVEN POLYPROPYLENE	12.0	12.0	0.0
6545014586178	OTOSCOPE & OPTHALMOSCOPE SET DELUX SOFT	3.0	3.0	0.0
6515014466766	OXIMETER PULSE PORTABLE HAND-HELD 110/220V	2.0	2.0	0.0
6515014626143	OXYGEN ADMIN KIT, CASE, REG, DEMAND VALVE	4.0	4.0	0.0
7240007725945	PAIL UTILITY 9 QTx8IN HIGH SURG OPERATING ROO	2.0	2.0	0.0
4110001156027	REFRIGERATOR MECHANICAL BIOLOGICALS 115V	1.0	1.0	0.0
6530007884010	RESTRAINT SET WRIST/ANKLE W/CARRYING CASE	1.0	1.0	0.0
6515012045394	RESUSCITATOR HAND OPERATED HIGH O2	4.0	4.0	0.0
6515009269193	RETRACTOR MASTOID WEITLANER 6.5IN HOOK	16.0	16.0	0.0
6515003609200	RETRACTOR SET RIGID DOUBLE ENDED 8.5IN BLADES	16.0	16.0	0.0
6530007926000	ROD IV BAG HANGING STEEL	12.0	12.0	0.0
6515003634100	SAW FINGER RING .75IN BLADE 6IN DIA	1.0	1.0	0.0
6515009357138	SCISSORS BANDAGE 7.25IN ANGLE TO HDL	12.0	12.0	0.0
6515003640520	SCISSORS GENERAL SURG MAYO 7IN CURVED	16.0	16.0	0.0
6515003640920	SCISSORS GENERAL SURGICAL MAYO 7IN STR	16.0	16.0	0.0
6515003644800	SCISSORS IRIS 4IN STRAIGHT FINGER RING	16.0	16.0	0.0
6515003657100	SCISSORS TONSIL METZENBAUM 7IN LG CURVED	16.0	16.0	0.0
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Figure 3 (cont). Sample Supplies for Selected Inventory Report Before Changes. (U)

AMAL:0631 Block:001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6530014296715	SINK UNIT SURGICAL SCRUB AND UTENSIL HOSPITAL	1.0	1.0	0.0
6515010394884	SPHYGMOMANOMETER ANEROID 300MM MAX	8.0	8.0	0.0
6530005518681	STAND SURGICAL INSTRUMENT ADJ FIELD OLIVE	4.0	4.0	0.0
6515013146694	STETHOSCOPE LITTMAN CLASSIC II 28IN LG	8.0	8.0	0.0
6515014350050	SUCTION APPARATUS SURGICAL PORTABLE	2.0	2.0	0.0
6530006600034	SUPPORT LITTER FOLDING LIGHTWEIGHT ALUM	8.0	8.0	0.0
6515001491407	THERMOMETER CLINICAL HUMAN RECTAL RED TIP	4.0	4.0	0.0
6515013753244	THERMOMETER HUMAN SUB-NORMAL 86-100 DEG 6S	1.0	1.0	0.0
6530007939570	TRAY INSTRUMENT STEEL 19x12x.75IN	4.0	4.0	0.0
6515010764713	TROUSERS PNEUMATIC ANTI-SHOCK	2.0	2.0	0.0
6515011929456	ULTRASOUND UNIT BLOOD FLOW DETECTION DOPPLER	1.0	1.0	0.0
6530007944090	URINAL MALE PATIENT RD SHAPE STEEL 2 QT	2.0	2.0	0.0

AMAL:0632 SST/Triage Consumables Attainment Rating
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0.9632

AMAL:0632 Block:001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6510002036010	ADHESIVE TAPE SURG 12INx5YDS MOLESKIN	1.0	1.0	0.0
6515013215211	AIRWAY KIT PERCUTANEOUS EMERGENCY ADULT 1S	1.0	1.0	0.0
6515011676637	AIRWAY NASOPHARYNGEAL ROBERTAZZI 30FR 12S	0.5	0.5	0.0
6515011649637	AIRWAY PHARYNGEAL CUT AWAY FLANGE 30FR 30S	1.0	1.0	0.0
6505002998179	ALBUMIN HUMAN USP 25% 100ML CAN	20.0	17.0	-3.0
6505011169245	ALBUTEROL INHALATION 17GM CONT 200 SPRAYS	1.0	1.0	0.0
6510012787002	APPLICATOR IMPREG w/BENZON 4IN LG 500S	0.1	0.1	0.0
6505014745440	ATROPINE SULFATE INJ USP .4000MG PER ML 20ML	2.0	1.0	-1.0
6530011075798	BAG STERILIZATION-BIOHAZ DISP 36x24IN 200S	0.5	0.5	0.0
6510005977469	BANDAGE ADHESIVE FLESH/CLEAR 3x.75IN 100S	1.0	1.0	0.0
6510001055807	BANDAGE ELASTIC COBAN FLESH 3" X 5YD 24S	1.0	1.0	0.0
6510009355822	BANDAGE ELASTIC ROLLED ACE 4INx4.5YDS 12S	6.0	6.0	0.0
6510009355823	BANDAGE ELASTIC ROLLED ACE 6INx4.5YDS 12S	2.0	2.0	0.0
6510000583047	BANDAGE GAUZE KERLIX 4.5INS x 4YDS 100S	2.0	2.0	0.0
6510002011755	BANDAGE MUSLIN CAMOUFLAGE 37x37x52IN 1S	36.0	36.0	0.0
6135009857845	BATTERY NONRECHARGABLE 1.5V AA 24S	5.0	5.0	0.0
6135008264798	BATTERY NONRECHARGABLE 1.5V AAA 24S	4.0	4.0	0.0
6515006600011	BLADE SURGICAL KNIFE DETACHABLE #10 6S	6.0	4.0	-2.0
6515010095293	BLADE SURGICAL KNIFE DETACHABLE #15 150S	0.2	0.2	0.0
7210009356665	BLANKET CASUALTY 84x56IN PLAST SOLID TAPD	50.0	43.0	-7.0
6515013637700	BOARD SPINAL FOLDING ALUM 19x36x2.5IN	3.0	3.0	0.0
6515012761351	BRACE ANKLE UNIV SIZE ADJUSTABLE PLAS 9IN LG	3.0	3.0	0.0
6505014752156	BRETYLIUM TOSYLATE 50MG/ML 10ML SYR/NDL10S	2.0	2.0	0.0
6530013643353	BRUSH-SPONGE SURG SCRUB NONSTER 3% PCMX 300S	0.1	0.1	0.0
6515011067648	CANISTER SUCT SURG 1500CC CAPACITY 100S	0.0	0.0	0.0
6515010726380	CANNULA LARYN YANKAURER DSGN 72IN LG 20S	2.0	2.0	0.0
6515013909627	CATHETER & NEEDLE UNIT IV 14Gax1.25IN 200S	1.0	1.0	0.0
6515013909654	CATHETER & NEEDLE UNIT IV 18Gax1.25IN 200S	0.5	0.5	0.0
6515013909650	CATHETER & NEEDLE UNIT IV 20Gax1.25IN 200S	0.5	0.5	0.0
6515011912011	CATHETERIZATION KIT SUPRAPUBIC STAMEY 14FR	2.0	2.0	0.0
6515001490104	CATHETERIZATION KIT URETHRAL 16FR DISP	25.0	25.0	0.0
6505014802501	CEFAZOLIN INJECTION 1GM VIAL 25S	0.5	0.5	0.0
6505012634531	CEFOXITIN SODIUM 2GM SINGLE DOSE VIAL 25S	0.4	0.4	0.0
6505012192760	CEFTRIAXONE SODIUM 1GM VIAL 10S	2.0	2.0	0.0

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Figure 3 (cont). Sample Supplies for Selected Inventory Report Before Changes. (U)

AMAL:0632 Block:001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6505012036253	CHARCOAL ACTIVATED & SORBITOL SUSPEN 120ML	2.0	2.0	0.0
6505011875540	CLINDAMYCIN PHOSPHATE INJECTION 6ML VI 25S	1.0	1.0	0.0
7920011263250	CLOTH CLEANING WHITE 15X12" 900S	1.0	1.0	0.0
6530011832863	CONTAINER DISPOSE HYPO NDL & SYR 6.9QT 12S	0.3	0.3	0.0
4020011111766	CORD TRACTION BRAIDED .1875IN #6	1.0	1.0	0.0
6515013738659	COVER ELECTRONIC THERMOMETER DISP 100S	2.0	1.0	-1.0
6515007777325	CRUTCHES 48-59" LG WOOD VARNISHED ADJ	5.0	5.0	0.0
6515007777340	CUSHION CRUTCH SPONGE RUBBER 8X1.5" 6" OP	5.0	3.0	-2.0
6505002999666	CYCLOPENTOLATE HCL OPHTHALMIC SOL 1% 15ML	1.0	1.0	0.0
6640011079169	DETERGENT GLASSWARE & INSTRUMENTS ALCONOX 4LB	1.0	1.0	0.0
6505001375891	DIAZEPAM INJ 5MG/ML 2ML SYRINGE w/NDL 10S	1.0	1.0	0.0
6505001487177	DIPHENHYDRAMINE HCL INJ 50MG/ML 1ML SYR 10S	2.0	2.0	0.0
6505011231060	DOPAMINE HCL INJ 40MG/ML 10ML UNIT 10S	1.0	1.0	0.0
6515010587450	DRAINAGE UNIT PLEUR CAV PLAS WATER-SEAL 6S	2.0	2.0	0.0
6510014575844	DRESSING BURN 8x18IN w/WATER-GEL 20S	3.0	3.0	0.0
6510014081920	DRESSING CHEST WOUND SEAL ASHERMAN 10S	1.0	1.0	0.0
6510002017430	DRESSING FIRST AID FIELD CAMO 7x8IN 1S	48.0	48.0	0.0
6510000835573	DRESSING FIRST AID FIELD WHITE 4x6IN PLEATED	100.0	93.0	-7.0
6505010932384	EPINEPHRINE INJ 0.1MG/ML SYR/NDL 10ML 10S	1.0	1.0	0.0
6505007341026	EPINEPHRINE INJ USP 1MG/ML 1ML AMPUL 10S	1.0	1.0	0.0
6505011591493	FLUORESCEIN SODIUM OPHTHALMIC STRIPS 300S	1.0	1.0	0.0
7540006344122	FORM PRINTED CLINICAL DOCTOR'S NOTES 100S	1.0	1.0	0.0
6505011575117	FUROSEMIDE INJECTION 10MG/ML 2ML AMP 25S	0.2	0.2	0.0
6510002020800	GAUZE PETROLATUM ACCORDION 18x3IN 12S	4.0	4.0	0.0
6505012139514	GENTAMICIN INJECTION 40MG/ML 2ML VI 25S	1.0	1.0	0.0
6505010222646	GENTAMICIN SULF OPTH SOL 3MG/ML 5ML	2.0	2.0	0.0
6515013648554	GLOVE PATIENT EXAM/TREAT LGE PREPWDR 100S	2.0	2.0	0.0
6515013648553	GLOVE PATIENT EXAM/TREAT MED PREPWDR 100S	2.0	2.0	0.0
6515011498839	GLOVES SURG GEN SURG SZ 6.5 PWDR-FREE 50PR	1.0	1.0	0.0
6515011498841	GLOVES SURG GEN SURG SZ 7.5 PWDR-FREE 50PR	1.0	1.0	0.0
6515011498842	GLOVES SURG GEN SURG SZ 8 RUBBER 50PR	1.0	1.0	0.0
6505002688530	HALOPERIDOL INJ USP 5MG/ML 1ML AMPUL 10S	1.0	1.0	0.0
6515012808163	INFUSOR PRESSURE BLOOD/IV 14x6IN 1000ML	24.0	24.0	0.0
6515012738647	INTRODUCER SET CATHETER PERCUTANEOUS 4 COMP 2	6.0	6.0	0.0
6515011050614	IV INJ SET MACRODRIP 15 DROPS/ML 50S	2.0	2.0	0.0
6515001400888	IV INJ SET MICRODRIP 60 DROPS/ML 48S	1.0	1.0	0.0
6505014554200	LIDOCAINE & EPINEPHRINE INJ 1:100000 20 ML VI	5.0	5.0	0.0
6505011561797	LIDOCAINE HCL INJ 1% 5ML 50MG SYR w/NDL 10S	2.0	2.0	0.0
6505005986116	LIDOCAINE HCL INJ USP 1% 10MG/ML 50ML BT	15.0	15.0	0.0
6505005843131	LIDOCAINE HYDROCHLORIDE JELLY USP 2% 30ML	1.0	1.0	0.0
6505001538809	LUBRICANT SURGICAL 4OZ (113.4GM) TUBE	2.0	2.0	0.0
6505011253253	MANNITOL INJECTION 25% 250MG/ML 50ML VIAL 25S	3.0	3.0	0.0
6515008886122	MASK ORONASAL SEMI-RIGID TRANSLUCENT 50S	0.5	0.5	0.0
6515013277257	MASK-SHIELD SURG FEMALE OPENING CLR 100S	1.0	1.0	0.0
6505011080808	METHYLPREDNISOLONE SODIUM SUCC INJ 1000MG	5.0	5.0	0.0
6505001490113	MORPHINE HCL INJ 10MG 1ML CART-NDL 10S	8.0	8.0	0.0
6505000797867	NALOXONE HCL INJ USP .4MG/ML 1ML AMP 10S	1.0	1.0	0.0
6515007542834	NEEDLE HYPO GP 18GA 1.5IN LG LUER LOCK 100S	1.0	1.0	0.0
6515011727650	NEEDLE HYPO GP 22GA 1.5IN LG LUER LOCK 100S	1.0	1.0	0.0
6505012463781	NITROGLYCERIN LINGUAL AEROSOL .4MG 200 DOSES	1.0	1.0	0.0
6505010083401	NITROGLYCERIN OINTMENT 2% 60GM TUBE	1.0	1.0	0.0
6505001325181	OXYGEN USP 99% CYLINDER TY-D 95GL	8.0	8.0	0.0
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Figure 3 (cont). Sample Supplies for Selected Inventory Report Before Changes. (U)

AMAL:0632		Block:001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta		
6510007755706	PAD ABDOMINAL 7.5 X 8" WHITE 3 LAYERS 240S	0.5	0.5	0.0		
6510007863736	PAD PREP ISOPROPYL ALCOHOL IMPREG 1x2.5IN 100	4.0	4.0	0.0		
6515014594403	PADS DEFIBRILLATION 2-PACK	5.0	5.0	0.0		
6505013329024	PHENYTOIN SODIUM INJ 50MG/ML 5ML VI 25S	1.0	1.0	0.0		
6505004917557	POVIDONE-IODINE CLEANSING SOL 7.5% 118ML	20.0	20.0	0.0		
6505007540374	POVIDONE-IODINE TOPICAL SOLUTION 1% 1GL	1.0	1.0	0.0		
6505006807352	PROMETHAZINE HCL INJ 25MG/ML 1M AMP 25S	2.0	2.0	0.0		
6505007539902	PROPACARCAINE HYDROCHLORIDE OPHTHALMIC SOLUTIO	1.0	1.0	0.0		
6515013225898	RAZOR SURGICAL PREPARATION PLAS DISP 100S	0.3	0.3	0.0		
6505014623025	RINGER'S INJECTION LACTATED 1000ML BAG 12S	11.0	11.0	0.0		
6515012538165	SHIELD EYE SURG GOFFMAN 50S	0.2	0.2	0.0		
6505002165370	SODIUM BICARB 8.4% SYR/NDL 1mEq/ML 50ML 10S	1.0	1.0	0.0		
6505013308925	SODIUM CHLORIDE INJECTION 0.9% 50ML BAG 84S	1.0	1.0	0.0		
6505014624194	SODIUM CHLORIDE IRRIGATION 0.9% 1000ML BT 12S	1.0	1.0	0.0		
6515014854041	SPLINT FINGER 18x0.75IN MALLEABLE w/FOAM 12S	1.0	1.0	0.0		
6515014618357	SPLINT MATERIAL POLYMER OCL ARM BONE 5S	2.0	2.0	0.0		
6515014618338	SPLINT MATERIAL POLYMER OCL LONG BONE 5S	3.0	3.0	0.0		
6515012508936	SPLINT TRACTION-EXTRICATION ADULT ALUMINUM	4.0	4.0	0.0		
6515014941951	SPLINT UNIV ALUM 4IN WI x 36IN LG 1S	24.0	24.0	0.0		
6510007822699	SPONGE SURG 12-PLY GAUZE 8x4IN NONSTER 200S	8.0	8.0	0.0		
6510007822698	SPONGE SURG 8-PLY GAUZE WHITE 4x4IN 200S	3.0	3.0	0.0		
6515010715561	STAPLER SKIN SURG DISP 6.9x3.9MM STAPLES 6S	1.0	1.0	0.0		
6515013948327	STYLET TRACHEAL TUBE 7.5-10MM PLAS DISP 10S	1.0	1.0	0.0		
6505014716410	SUCCINYLCHOLINE CHLORIDE 100MG/ML 10MLVI 25S	1.0	1.0	0.0		
6515011676666	SUCTION SET TRACHEAL 14FR x22 PLAS 100S	0.5	0.5	0.0		
6505005607331	SULFADIAZINE SILVER CREAM 1% TOP 400GM JR	2.0	2.0	0.0		
6515013701693	SUPPORT CERVICAL PHILLY DSGN LGE 16-18IN NECK	4.0	4.0	0.0		
6515013701691	SUPPORT CERVICAL PHILLY DSGN MED 13-15IN NECK	12.0	12.0	0.0		
6530013080984	SURGICAL PACK DISP WET SKIN SCRUB PACKS 20S	3.0	3.0	0.0		
6515012317236	SUTURE ABS GI SZ 4-0 COATED VICRYL 3S	9.0	9.0	0.0		
6515011535733	SUTURE NONABS GEN CLO SZ 1 MONO PLAS 12S	2.0	2.0	0.0		
6515007344342	SUTURE NONABS SZ 4-0 NYLON CUTTING NDL 36S	2.0	2.0	0.0		
6515014587025	SYRINGE & NEEDLE VANISH-POINT 10CC 21GA 100S	1.0	1.0	0.0		
6515014123099	SYRINGE HYPO GENERAL PURPOSE LUER 60ML 20S	2.0	2.0	0.0		
6515007540412	SYRINGE HYPO GP 10ML CAP LUER SLIP 100S	1.0	1.0	0.0		
6515014123101	SYRINGE HYPODERMIC 20ML 40S	2.0	2.0	0.0		
6515014570288	SYRINGE IRRIGATING 60ML LUER PLAS DISP 120S	0.2	0.2	0.0		
8465013376792	TAG TRIAGE CARDBOARD 200S	0.5	0.5	0.0		
6510009268882	TAPE ADHESIVE SURG WOVEN 1INx12YD 12S	1.0	1.0	0.0		
6510009268884	TAPE ADHESIVE SURG WOVEN 3INx10YD 4S	3.0	3.0	0.0		
6515013737292	THERMOMETER CLINICAL HUMAN ORAL DIGTAL	4.0	4.0	0.0		
6515010133911	TIP CANE & CRUTCH RUBBER 12S	1.0	1.0	0.0		
6515011885316	TUBE DRAINAGE SURG PENROSE 1X18IN 200S	0.3	0.3	0.0		
6515008669073	TUBE DRAINAGE SURG THORACIC 36FR STR 10S	2.0	2.0	0.0		
6515010369034	TUBE ENDOTRACHEAL MURPHY 7.5MM 10S	1.0	1.0	0.0		
6515001050759	TUBE ENDOTRACHEAL MURPHY 8.0MM OD 10S	1.0	1.0	0.0		
6515003865800	TUBE STOMACH LAVAGE w/FUNNEL 30FR 60 IN LG 1S	1.0	1.0	0.0		
6515001490316	TUBE STOMACH SURGICAL PLASTIC SALEM 50S	0.5	0.5	0.0		
6515012774772	TUBING SURGICAL PLAS BULBOUS NONSTER 100FT	1.0	1.0	0.0		
6515009269150	VALVE DRAIN HEIMLICH 4.50" LG 1" DIA 10S	2.0	2.0	0.0		
6505012580983	VECURIUM BROMIDE INJ 10MG/ML 10ML VI 10S	1.0	1.0	0.0		
6505012663771	VERAPAMIL HCL INJ 2.5MG/ML 4ML SYR 10S	1.0	1.0	0.0		

invsup

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Figure 3 (cont). Sample Supplies for Selected Inventory Report Before Changes. (U)

(U) Figure 4 shows the inventory after certain supply quantities were decreased. Tables 5 and 6 list the changes in blocks 631 and 632 respectively.

Table 5. Block 631 Supply Items With Decreased Quantities. (U)

Supply Item	Qty in Figure 3	Qty in Figure 4
Forceps Hemo Halsted Mosquito Pt 5in Curve	32	22
Forceps Hemo Kelly 5.25-5.75" Lg Slight Curve	36	26
Forceps Hemo Pean 9in Slightly Curved	32	16
Forceps Hemostat Halsted Mosquito Pt 5in Lg	32	20
Forceps Towel Backhaus 4in Opposed Prongs	60	50
Handle Surg Knife Blade Sz 3 Narrow Nose	28	16
Holder Suture Needle Collier 5in Straight	16	5

Table 6. Block 632 Supply Items With Decreased Quantities. (U)

Supply Item	Qty in Figure 3	Qty in Figure 4
Albumin Human Usp 25% 100ml Can	17	10
Oxygen Usp 99% Cylinder Ty-D 95gl	8	2
Povidone-Iodine Cleansing Sol 7.5% 118ml	20	6
Splint Univ Alum 4in Wi X 36in Lg 1s	24	12

(U) The changes summarized above affected the overall S rating, which dropped from .9688 in Figure 3 to .8816 in Figure 4. The S rating for block 631 changed from .9734 to .8655, and the S rating for block 632 changed from .9632 to .9008.



Report: Supplies for a Selected Inventory
Inventory: SST supplies

Date: 10/31/02

S
Attainment: 0.8816

Inventory Analysis	Total Items and JRCAB Risk Code 1A/1B Items
AMAL Block Description	S Risk S
0631 001 SST/Triage Equipment	0.8655 0.8655
0632 001 SST/Triage Consumables	0.9008 0.9008

Figure 4. Sample Supplies for Selected Inventory Report After Changes. (U)

AMAL:0631 SST/Triage Equipment		Attainment Ratings		
		S		
		0.8655		
AMAL:0631 Block:001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6530007710105	BASIN WASH CORROSION RESISITING STEEL 7QT	8.0	6.0	-2.0
6530014212971	BASKET STERILIZATION SURG INSTR 9x5x2IN	16.0	12.0	-4.0
6515014947971	BATTERY PACK DEFIB AED u/w 6515014794272 1S	2.0	2.0	0.0
6530007717025	BEDPAN OVAL 11 x14 x 4IN STEEL	2.0	0.0	-2.0
6515003634150	BLADE FINGER RING SAW STEEL CARBON 1S	2.0	2.0	0.0
6515014604672	BLADE LARYNGOSCOPE MACINTOSH NO. 4 PLAS	4.0	4.0	0.0
6515014604725	BLADE LARYNGOSCOPE MILLER 2 RUGGED PLAS	4.0	4.0	0.0
6515014604681	BLADE LARYNGOSCOPE ADULT MILLER #3 PLAS	3.0	2.0	-1.0
7530002223527	BOOK RECORD 14x8.5IN 288 PAGES	2.0	1.0	-1.0
6530007720326	BOWL SURGICAL SPONGE STEEL 3IN DEEP 6IN DIA	8.0	8.0	0.0
6530014210847	CASE STERILIZATION 10x7IN RIGID MINI-SIZE	16.0	16.0	0.0
6515014794272	DEFIB-MONITOR AUTO EXTERNAL w/OVERRIDE	1.0	1.0	0.0
6515003344900	FORCEPS HEMO HALSTED MOSQUITO PT 5IN CURVE	32.0	22.0	-10.0
6515003343800	FORCEPS HEMO KELLY 5.25-5.75" LG SLIGHT CURVE	36.0	26.0	-10.0
6515003349500	FORCEPS HEMO PEAN 9IN SLIGHTLY CURVED	32.0	16.0	-16.0
6515003345600	FORCEPS HEMOSTAT HALSTED MOSQUITO PT 5IN LG	32.0	20.0	-12.0
6515003347400	FORCEPS HEMOSTAT ROCHESTER-OCHSNER 6IN	32.0	32.0	0.0
6515003346800	FORCEPS HEMOSTATIC KELLY 5.5IN STRAIGHT	32.0	32.0	0.0
6515003377800	FORCEPS TISSUE ADSON 4.50IN TWEEZER	32.0	32.0	0.0
6515003380300	FORCEPS TISSUE ALLIS 6IN PIVOTED STR & SMOOTH	32.0	32.0	0.0
6515003204590	FORCEPS TOWEL BACKHAUS 4IN OPPOSED PRONGS	64.0	50.0	-14.0
6540012901157	GOGGLES PROTECTIVE DISTORT-FREE LENSES 100S	0.1	0.1	0.0
6515003447800	HANDLE SURG KNIFE BLADE SZ 3 NARROW NOSE	32.0	16.0	-16.0
6515003417200	HOLDER SUTURE NEEDLE COLLIER 5IN STRAIGHT	16.0	5.0	-11.0
6515002998737	HOLDER SUTURE NEEDLE HEGAR-MAYO 7IN	16.0	16.0	0.0
6515006198219	HOLDER SUTURE NEEDLE WEBSTER STR 5IN	16.0	14.0	-2.0
6515013448487	INJECTOR TUBE REUSABLE 1ML & 2ML NDL UNITS	4.0	4.0	0.0
6515014553888	LANTERN ELECTRIC HEAD MOUNT HALO/KRYPTON	30.0	30.0	0.0
6515014509790	LARYNGOSCOPE SET SOFTCASE w/LIGHT BLADES	4.0	4.0	0.0
6540014553885	LENS COVER RED LANTERN ELECTRIC HEAD MOUNT	30.0	30.0	0.0
6530013168733	LIGHT SURGICAL FIELD 110 VOLT AC OR 24 VOLT	4.0	4.0	0.0
8405008893683	LINER PONCHO (TRI-SERVICE APPROVED BLANKET)	12.0	12.0	0.0
6530014325114	LITTER RIGID FOLDING RAVEN POLYPROPYLENE	12.0	12.0	0.0
6545014586178	OTOSCOPE & OPHTHALMOSCOPE SET DELUX SOFT	3.0	3.0	0.0
6515014466766	OXIMETER PULSE PORTABLE HAND-HELD 110/220V	2.0	2.0	0.0
6515014626143	OXYGEN ADMIN KIT, CASE, REG, DEMAND VALVE	4.0	4.0	0.0
7240007725945	PAIL UTILITY 9 QTx8IN HIGH SURG OPERATING ROO	2.0	2.0	0.0
4110001156027	REFRIGERATOR MECHANICAL BIOLOGICALS 115V	1.0	1.0	0.0
6530007884010	RESTRAINT SET WRIST/ANKLE W/CARRYING CASE	1.0	1.0	0.0
6515012045394	RESUSCITATOR HAND OPERATED HIGH O2	4.0	4.0	0.0
6515009269193	RETRACTOR MASTOID WEITLANER 6.5IN HOOK	16.0	16.0	0.0
6515003609200	RETRACTOR SET RIGID DOUBLE ENDED 8.5IN BLADES	16.0	16.0	0.0
6530007926000	ROD IV BAG HANGING STEEL	12.0	12.0	0.0
6515003634100	SAW FINGER RING .75IN BLADE 6IN DIA	1.0	1.0	0.0
6515009357138	SCISSORS BANDAGE 7.25IN ANGLE TO HDL	12.0	12.0	0.0
6515003640520	SCISSORS GENERAL SURG MAYO 7IN CURVED	16.0	16.0	0.0
6515003640920	SCISSORS GENERAL SURGICAL MAYO 7IN STR	16.0	16.0	0.0
6515003644800	SCISSORS IRIS 4IN STRAIGHT FINGER RING	16.0	16.0	0.0
6515003657100	SCISSORS TONSIL METZENBAUM 7IN LG CURVED	16.0	16.0	0.0
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Figure 4 (cont). Sample Supplies for Selected Inventory Report After Changes. (U)

AMAL:0631 Block:001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6530014296715	SINK UNIT SURGICAL SCRUB AND UTENSIL HOSPITAL	1.0	1.0	0.0
6515010394884	SPHYGMOMANOMETER ANEROID 300MM MAX	8.0	8.0	0.0
6530005518681	STAND SURGICAL INSTRUMENT ADJ FIELD OLIVE	4.0	4.0	0.0
6515013146694	STETHOSCOPE LITTMAN CLASSIC II 28IN LG	8.0	8.0	0.0
6515014350050	SUCTION APPARATUS SURGICAL PORTABLE	2.0	2.0	0.0
6530006600034	SUPPORT LITTER FOLDING LIGHTWEIGHT ALUM	8.0	8.0	0.0
6515001491407	THERMOMETER CLINICAL HUMAN RECTAL RED TIP	4.0	4.0	0.0
6515013753244	THERMOMETER HUMAN SUB-NORMAL 86-100 DEG 6S	1.0	1.0	0.0
6530007939570	TRAY INSTRUMENT STEEL 19x12x.75IN	4.0	4.0	0.0
6515010764713	TROUSERS PNEUMATIC ANTI-SHOCK	2.0	2.0	0.0
6515011929456	ULTRASOUND UNIT BLOOD FLOW DETECTION DOPPLER	1.0	1.0	0.0
6530007944090	URINAL MALE PATIENT RD SHAPE STEEL 2 QT	2.0	2.0	0.0

AMAL:0632 SST/Triage Consumables		Attainment Ratings		
		S		
		0.9008		

AMAL:0632 Block:001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6510002036010	ADHESIVE TAPE SURG 12INx5YDS MOLESKIN	1.0	1.0	0.0
6515013215211	AIRWAY KIT PERCUTANEOUS EMERGENCY ADULT 1S	1.0	1.0	0.0
6515011676637	AIRWAY NASOPHARYNGEAL ROBERTAZZI 30FR 12S	0.5	0.5	0.0
6515011649637	AIRWAY PHARYNGEAL CUT AWAY FLANGE 30FR 30S	1.0	1.0	0.0
6505002998179	ALBUMIN HUMAN USP 25% 100ML CAN	20.0	10.0	-10.0
6505011169245	ALBUTEROL INHALATION 17GM CONT 200 SPRAYS	1.0	1.0	0.0
6510012787002	APPLICATOR IMPREG w/BENZOIN 4IN LG 500S	0.1	0.1	0.0
6505014745440	ATROPINE SULFATE INJ USP .4000MG PER ML 20ML	2.0	1.0	-1.0
6530011075798	BAG STERILIZATION-BIOHAZ DISP 36x24IN 200S	0.5	0.5	0.0
6510005977469	BANDAGE ADHESIVE FLESH/CLEAR 3x.75IN 100S	1.0	1.0	0.0
6510001055807	BANDAGE ELASTIC COBAN FLESH 3" X 5YD 24S	1.0	1.0	0.0
6510009355822	BANDAGE ELASTIC ROLLED ACE 4INx4.5YDS 12S	6.0	6.0	0.0
6510009355823	BANDAGE ELASTIC ROLLED ACE 6INx4.5YDS 12S	2.0	2.0	0.0
6510000583047	BANDAGE GAUZE KERLIX 4.5INS x 4YDS 100S	2.0	2.0	0.0
6510002011755	BANDAGE MUSLIN CAMOUFLAGE 37x37x52IN 1S	36.0	36.0	0.0
6135009857845	BATTERY NONRECHARGABLE 1.5V AA 24S	5.0	5.0	0.0
6135008264798	BATTERY NONRECHARGABLE 1.5V AAA 24S	4.0	4.0	0.0
6515006600011	BLADE SURGICAL KNIFE DETACHABLE #10 6S	6.0	4.0	-2.0
6515010095293	BLADE SURGICAL KNIFE DETACHABLE #15 150S	0.2	0.2	0.0
7210009356665	BLANKET CASUALTY 84x56IN PLAST SOLID TAPD	50.0	43.0	-7.0
6515013637700	BOARD SPINAL FOLDING ALUM 19x36x2.5IN	3.0	3.0	0.0
6515012761351	BRACE ANKLE UNIV SIZE ADJUSTABLE PLAS 9IN LG	3.0	3.0	0.0
6505014752156	BRETYLIUM TOSYLATE 50MG/ML 10ML SYR/NDL10S	2.0	2.0	0.0
6530013643353	BRUSH-SPONGE SURG SCRUB NONSTER 3% PCMX 300S	0.1	0.1	0.0
6515011067648	CANISTER SUCT SURG 1500CC CAPACITY 100S	0.0	0.0	0.0
6515010726380	CANNULA LARYN YANKAURER DSGN 72IN LG 20S	2.0	2.0	0.0
6515013909627	CATHETER & NEEDLE UNIT IV 14GAx1.25IN 200S	1.0	1.0	0.0
6515013909654	CATHETER & NEEDLE UNIT IV 18GAx1.25IN 200S	0.5	0.5	0.0
6515013909650	CATHETER & NEEDLE UNIT IV 20GAx1.25IN 200S	0.5	0.5	0.0
6515011912011	CATHETERIZATION KIT SUPRAPUBIC STAMEY 14FR	2.0	2.0	0.0
6515001490104	CATHETERIZATION KIT URETHRAL 16FR DISP	25.0	25.0	0.0
6505014802501	CEFAZOLIN INJECTION 1GM VIAL 25S	0.5	0.5	0.0
6505012634531	CEFOXITIN SODIUM 2GM SINGLE DOSE VIAL 25S	0.4	0.4	0.0
6505012192760	CEFTRIAXONE SODIUM 1GM VIAL 10S	2.0	2.0	0.0

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Figure 4 (cont). Sample Supplies for Selected Inventory Report After Changes. (U)

AMAL:0632 Block: 001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6505012036253	CHARCOAL ACTIVATED & SORBITOL SUSPEN 120ML	2.0	2.0	0.0
6505011875540	CLINDAMYCIN PHOSPHATE INJECTION 6ML VI 25S	1.0	1.0	0.0
7920011263250	CLOTH CLEANING WHITE 15X12" 900S	1.0	1.0	0.0
6530011832863	CONTAINER DISPOSE HYPO NDL & SYR 6.9QT 12S	0.3	0.3	0.0
4020011111766	CORD TRACTION BRAIDED .1875IN #6	1.0	1.0	0.0
6515013738659	COVER ELECTRONIC THERMOMETER DISP 100S	2.0	1.0	-1.0
6515007777325	CRUTCHES 48-59" LG WOOD VARNISHED ADJ	5.0	5.0	0.0
6515007777340	CUSHION CRUTCH SPONGE RUBBER 8X1.5" 6" OP	5.0	3.0	-2.0
6505002999666	CYCLOPENTOLATE HCL OPTHALMIC SOL 1% 15ML	1.0	1.0	0.0
6640011079169	DETERGENT GLASSWARE & INSTRUMENTS ALCONOX 4LB	1.0	1.0	0.0
6505001375891	DIAZEPAM INJ 5MG/ML 2ML SYRINGE w/NDL 10S	1.0	1.0	0.0
6505001487177	DIPHENHYDRAMINE HCL INJ 50MG/ML 1ML SYR 10S	2.0	2.0	0.0
6505011231060	DOPAMINE HCL INJ 40MG/ML 10ML UNIT 10S	1.0	1.0	0.0
6515010587450	DRAINAGE UNIT PLEUR CAV PLAS WATER-SEAL 6S	2.0	2.0	0.0
6510014575844	DRESSING BURN 8x18IN w/WATER-GEL 20S	3.0	3.0	0.0
6510014081920	DRESSING CHEST WOUND SEAL ASHERMAN 10S	1.0	1.0	0.0
6510002017430	DRESSING FIRST AID FIELD CAMO 7x8IN 1S	48.0	48.0	0.0
6510000835573	DRESSING FIRST AID FIELD WHITE 4x6IN PLEATED	100.0	93.0	-7.0
6505010932384	EPINEPHRINE INJ 0.1MG/ML SYR/NDL 10ML 10S	1.0	1.0	0.0
6505007341026	EPINEPHRINE INJ USP 1MG/ML 1ML AMPUL 10S	1.0	1.0	0.0
6505011591493	FLUORESCEIN SODIUM OPTHALMIC STRIPS 300S	1.0	1.0	0.0
7540006344122	FORM PRINTED CLINICAL DOCTOR'S NOTES 100S	1.0	1.0	0.0
6505011575117	FUROSEMIDE INJECTION 10MG/ML 2ML AMP 25S	0.2	0.2	0.0
6510002020800	GAUZE PETROLATUM ACCORDION 18x3IN 12S	4.0	4.0	0.0
6505012139514	GENTAMICIN INJECTION 40MG/ML 2ML VI 25S	1.0	1.0	0.0
6505010222646	GENTAMICIN SULF OPTH SOL 3MG/ML 5ML	2.0	2.0	0.0
6515013648554	GLOVE PATIENT EXAM/TREAT LGE PREPWDR 100S	2.0	2.0	0.0
6515013648553	GLOVE PATIENT EXAM/TREAT MED PREPWDR 100S	2.0	2.0	0.0
6515011498839	GLOVES SURG GEN SURG SZ 6.5 PWDR-FREE 50PR	1.0	1.0	0.0
6515011498841	GLOVES SURG GEN SURG SZ 7.5 PWDR-FREE 50PR	1.0	1.0	0.0
6515011498842	GLOVES SURG GEN SURG SZ 8 RUBBER 50PR	1.0	1.0	0.0
6505002688530	HALOPERIDOL INJ USP 5MG/ML 1ML AMPUL 10S	1.0	1.0	0.0
6515012808163	INFUSOR PRESSURE BLOOD/IV 14x6IN 1000ML	24.0	24.0	0.0
6515012738647	INTRODUCER SET CATHETER PERCUTANEOUS 4 COMP 2	6.0	6.0	0.0
6515011050614	IV INJ SET MACRODRIP 15 DROPS/ML 50S	2.0	2.0	0.0
6515001400888	IV INJ SET MICRODRIP 60 DROPS/ML 48S	1.0	1.0	0.0
6505014554200	LIDOCAINE & EPINEPHRINE INJ 1:100000 20 ML VI	5.0	5.0	0.0
6505011561797	LIDOCAINE HCL INJ 1% 5ML 50MG SYR w/NDL 10S	2.0	2.0	0.0
6505005986116	LIDOCAINE HCL INJ USP 1% 10MG/ML 50ML BT	15.0	15.0	0.0
6505005843131	LIDOCAINE HYDROCHLORIDE JELLY USP 2% 30ML	1.0	1.0	0.0
6505001538809	LUBRICANT SURGICAL 4OZ (113.4GM) TUBE	2.0	2.0	0.0
6505011253253	MANNITOL INJECTION 25% 250MG/ML 50ML VIAL 25S	3.0	3.0	0.0
6515008886122	MASK ORONASAL SEMI-RIGID TRANSLUCENT 50S	0.5	0.5	0.0
6515013277257	MASK-SHIELD SURG FEMALE OPENING CLR 100S	1.0	1.0	0.0
6505011080808	METHYLPREDNISOLONE SODIUM SUCC INJ 1000MG	5.0	5.0	0.0
6505001490113	MORPHINE SULF INJ 10MG 1ML CART-NDL 10S	8.0	8.0	0.0
6505000797867	NALOXONE HCL INJ USP .4MG/ML 1ML AMP 10S	1.0	1.0	0.0
6515007542834	NEEDLE HYPO GP 18GA 1.5IN LG LUER LOCK 100S	1.0	1.0	0.0
6515011727650	NEEDLE HYPO GP 22GA 1.5IN LG LUER LOCK 100S	1.0	1.0	0.0
6505012463781	NITROGLYCERIN LINGUAL AEROSOL .4MG 200 DOSES	1.0	1.0	0.0
6505010083401	NITROGLYCERIN OINTMENT 2% 60GM TUBE	1.0	1.0	0.0
6505001325181	OXYGEN USP 99% CYLINDER TY-D 95GL	8.0	2.0	-6.0
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Figure 4 (cont). Sample Supplies for Selected Inventory Report After Changes. (U)

AMAL:0632 Block: 001		Supply Quantities		
Nsn	Nomen	AMAL	On Hand	Delta
6510007755706	PAD ABDOMINAL 7.5 X 8" WHITE 3 LAYERS 240S	0.5	0.5	0.0
6510007863736	PAD PREP ISOPROPYL ALCOHOL IMPREG 1x2.5IN 100	4.0	4.0	0.0
6515014594403	PADS DEFIBRILLATION 2-PACK	5.0	5.0	0.0
6505013329024	PHENYTOIN SODIUM INJ 50MG/ML 5ML VI 25S	1.0	1.0	0.0
6505004917557	POVIDONE-IODINE CLEANSING SOL 7.5% 118ML	20.0	6.0	-14.0
6505007540374	POVIDONE-IODINE TOPICAL SOLUTION 1% 1GL	1.0	1.0	0.0
6505006807352	PROMETHAZINE HCL INJ 25MG/ML 1M AMP 25S	2.0	2.0	0.0
6505007539902	PROPARACAINE HYDROCHLORIDE OPHTHALMIC SOLUTIO	1.0	1.0	0.0
6515013225898	RAZOR SURGICAL PREPARATION PLAS DISP 100S	0.3	0.3	0.0
6505014623025	RINGER'S INJECTION LACTATED 1000ML BAG 12S	11.0	11.0	0.0
6515012538165	SHIELD EYE SURG GOFFMAN 50S	0.2	0.2	0.0
6505002165370	SODIUM BICARB 8.4% SYR/NDL 1mEq/ML 50ML 10S	1.0	1.0	0.0
6505013308925	SODIUM CHLORIDE INJECTION 0.9% 50ML BAG 84S	1.0	1.0	0.0
6505014624194	SODIUM CHLORIDE IRRIGATION 0.9% 1000ML BT 12S	1.0	1.0	0.0
6515014854041	SPLINT FINGER 18x0.75IN MALLEABLE w/FOAM 12S	1.0	1.0	0.0
6515014618357	SPLINT MATERIAL POLYMER OCL ARM BONE 5S	2.0	2.0	0.0
6515014618338	SPLINT MATERIAL POLYMER OCL LONG BONE 5S	3.0	3.0	0.0
6515012508936	SPLINT TRACTION-EXTRICATION ADULT ALUMINUM	4.0	4.0	0.0
6515014941951	SPLINT UNIV ALUM 4IN WI x 36IN LG 1S	24.0	12.0	-12.0
6510007822699	SPONGE SURG 12-PLY GAUZE 8x4IN NONSTER 200S	8.0	8.0	0.0
6510007822698	SPONGE SURG 8-PLY GAUZE WHITE 4x4IN 200S	3.0	3.0	0.0
6515010715561	STAPLER SKIN SURG DISP 6.9x3.9MM STAPLES 6S	1.0	1.0	0.0
6515013948327	STYLET TRACHEAL TUBE 7.5-10MM PLAS DISP 10S	1.0	1.0	0.0
6505014716410	SUCCINYLCHOLINE CHLORIDE 100MG/ML 10MLVI 25S	1.0	1.0	0.0
6515011676666	SUCTION SET TRACHEAL 14FR x22 PLAS 100S	0.5	0.5	0.0
6505005607331	SULFADIAZINE SILVER CREAM 1% TOP 400GM JR	2.0	2.0	0.0
6515013701693	SUPPORT CERVICAL PHILLY DSGN LGE 16-18IN NECK	4.0	4.0	0.0
6515013701691	SUPPORT CERVICAL PHILLY DSGN MED 13-15IN NECK	12.0	12.0	0.0
6530013080984	SURGICAL PACK DISP WET SKIN SCRUB PACKS 20S	3.0	3.0	0.0
6515012317236	SUTURE ABS GI SZ 4-0 COATED VICRYL 3S	9.0	9.0	0.0
6515011535733	SUTURE NONABS GEN CLO SZ 1 MONO PLAS 12S	2.0	2.0	0.0
6515007344342	SUTURE NONABS SZ 4-0 NYLON CUTTING NDL 36S	2.0	2.0	0.0
6515014587025	SYRINGE & NEEDLE VANISH-POINT 10CC 21GA 100S	1.0	1.0	0.0
6515014123099	SYRINGE HYPO GENERAL PURPOSE LUER 60ML 20S	2.0	2.0	0.0
6515007540412	SYRINGE HYPO GP 10ML CAP LUER SLIP 100S	1.0	1.0	0.0
6515014123101	SYRINGE HYPODERMIC 20ML 40S	2.0	2.0	0.0
6515014570288	SYRINGE IRRIGATING 60ML LUER PLAS DISP 120S	0.2	0.2	0.0
8465013376792	TAG TRIAGE CARDBOARD 200S	0.5	0.5	0.0
6510009268882	TAPE ADHESIVE SURG WOVEN 1INx12YD 12S	1.0	1.0	0.0
6510009268884	TAPE ADHESIVE SURG WOVEN 3INx10YD 4S	3.0	3.0	0.0
6515013737292	THERMOMETER CLINICAL HUMAN ORAL DIGTAL	4.0	4.0	0.0
6515010133911	TIP CANE & CRUTCH RUBBER 12S	1.0	1.0	0.0
6515011885316	TUBE DRAINAGE SURG PENROSE 1X18IN 200S	0.3	0.3	0.0
6515008669073	TUBE DRAINAGE SURG THORACIC 36FR STR 10S	2.0	2.0	0.0
6515010369034	TUBE ENDOTRACHEAL MURPHY 7.5MM 10S	1.0	1.0	0.0
6515001050759	TUBE ENDOTRACHEAL MURPHY 8.0MM OD 10S	1.0	1.0	0.0
6515003865800	TUBE STOMACH LAVAGE w/FUNNEL 30FR 60 IN LG 1S	1.0	1.0	0.0
6515001490316	TUBE STOMACH SURGICAL PLASTIC SALEM 50S	0.5	0.5	0.0
6515012774772	TUBING SURGICAL PLAS BULBOUS NONSTER 100FT	1.0	1.0	0.0
6515009269150	VALVE DRAIN HEIMLICH 4.50" LG 1" DIA 10S	2.0	2.0	0.0
6505012580983	VECURONIUM BROMIDE INJ 10MG/ML 10ML VI 10S	1.0	1.0	0.0
6505012663771	VERAPAMIL HCL INJ 2.5MG/ML 4ML SYR 10S	1.0	1.0	0.0

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Figure 4 (cont.). Sample Supplies for Selected Inventory Report After Changes. (U)

Current Applications of ESP (U)

(U) With its ability to estimate supplies and assess inventory readiness, ESP can be used to:

(U) 1. *Generate the supplies needed to treat a user-defined patient distribution.* Medical officers preparing for a deployment or field training exercise can determine the supply list and the quantity, weight, and cube of each supply required to treat possible injuries and illnesses incurred by personnel. One use for these data is to project the transportation assets required to move the materiel. If adequate space is not available for the medical resources, ESP can be used to justify transportation needs by identifying how the lack of materiel affects treatment options.

(U) 2. *Compare an inventory with the supplies required by a particular patient stream or with the supplies that should be in the supply blocks.* Medical providers and supply officers can use ESP to determine whether their inventory contains the appropriate clinical items in the adequate amounts. Before deployment the medical provider can build an expected patient stream, determine the supply requirements, and compare that list with those supplies currently in inventory. The provider may submit supply requests for the projected clinical items, citing the ESP clinical justification for their procurement.

(U) 3. *Report the clinical readiness of an inventory.* Medical planners preparing for a deployment can use ESP to provide visibility of the available assets. ESP outlines the critical items that are missing, the areas from which they are missing, and the clinical capabilities affected by the discrepancies. Operational commanders use this information to determine the optimal supply set for deployment.

(U) 4. *Query the database when conducting an supply review to understand the relationship among PCs, medical tasks, supplies, and areas of care.* New medical items are routinely incorporated into supply blocks as a result of changing protocols, technological advances, and the availability of more effective drugs. Adding new materiel may create redundancies, increase costs unnecessarily by duplicating treatment options, or fail to achieve interoperability with existing materiel both within the Department of the Navy and among the services. ESP can be used during supply block reviews to monitor the complex relationships between clinical functions and the required medical supply items.

(U) 5. *Query the database to develop training guidelines.* The ESP query is effective for training medical personnel because it presents complex information quickly and intelligibly. Medical officers can use ESP to develop refresher training for first responders, nurses, and physicians that reviews the medical tasks and the associated consumable supplies and equipment required to treat each PC. In addition, ESP can be used to study the relationship between areas of care, medical tasks, and supplies.

Continuing Work (U)

Using ESP for Supply Reviews (U)

(U) Currently, MARCORSYSCOM is using ESP to perform supply reviews. The ESP database links PCs with the medical tasks required to treat the PC and the supplies required to complete the medical tasks. As MARCORSYSCOM proposes to add or remove old items, ESP is used as a tool to investigate how the item changes will affect patient treatment. For example, when a supply is being considered for deletion, the databases in ESP are queried to obtain a list of all the medical tasks and PCs that require that supply. Using ESP, MARCORSYSCOM can see the ramifications of removing the supply. ESP answers questions such as “If this supply is removed from one task, what other tasks are affected? Can those tasks still be performed at a high standard of care? Does a new supply need to be

added?” ESP provides MARCORSYSCOM with a quick, efficient aid that makes visible all the connections between supplies, medical tasks, and PCs.

Designing Resupply/Sustainment Blocks (U)

(U) The Marine Corps has recently adopted a focus on streamlining the configuration of the supply blocks. MARCORSYSCOM has identified ESP as the software to manage this process (see message R 06015Z from Commandant of the Marine Corps, Washington, June 2, 2002, DC).

(U) A sketch of the current system is as follows: a unit is issued supply blocks for a mission. As the mission progresses, the unit uses certain supplies more than others, depending on the patient stream. As the quantities of these supplies become low, the unit is resupplied with the entire supply block, including those supplies that were not used in the first place. As a result, units become oversupplied with items that are not required by the patient stream. A drain on resources, this system leaves room for substantial improvement in efficiency.

(U) ESP is being used to research the best way to configure the sustainment blocks. High-intensity patient streams are run through ESP to determine the supply items, their quantities, the number of times the supply is used, and how many “supply block’s worth” of the supply is required to treat the patients. The supply block’s worth quantity indicates how many times the amount currently in the supply block is needed to treat the entire patient stream (e.g., if 20 of a supply are needed to treat the patient stream and 4 are in the supply block, 5 supply block’s worth of the supply are required). The supplies are then ranked to determine which supplies are drawn down and how to configure the blocks to sustain the mission. For example, supplies A, B, C, D, and E will be in the initial block issued to the unit, but perhaps only A, B, and D will be in the first set of sustainment blocks, and perhaps only A and B will be in the second set of sustainment blocks. This would be the case

when the initial block contained enough of supplies C and E to last for the entire patient stream.

(U) MARCORSYSCOM is currently using ESP to research the pros and cons involved in configuring generic sustainment blocks that best anticipate a patient stream in comparison to “make-to-order” sustainment blocks that are configured for each individual patient stream.

Developing Criticality Codes (U)

(U) The S rating provides a start in the ability to assess inventory readiness. Currently, NHRC is working on methods to improve this capability by determining more meaningful criteria upon which to judge readiness.

(U) As previously mentioned, the U.S. military currently lacks a standard procedure for reporting medical readiness. Accurate and meaningful reports of medical readiness are difficult to design and compile because criticality codes associated with the supplies in each supply block do not exist. In other words, each item is considered to be of equal clinical importance; therefore, the lack of a certain bandage and the lack of an x-ray machine are evaluated equally even though the impact of the missing x-ray machine is much greater than that of the bandage.

(U) NHRC designed a process to assign criticality codes to each supply item. First, each medical task is given one of the following ratings: 1 for lifesaving, 2 for medically important, and 3 for routine or not critical. Second, the supplies for each critical task (rated 1) are evaluated on two factors. Factor A is a numerical rating that indicates whether the supply is required for task completion. The supply is given a 5 if it is required for task completion, a 3 if it is beneficial but not required, or a 1 if it is not required for task completion. Factor B is a numerical rating that indicates if the missing supply item has a substitute contained in the same supply block. The supply item is

coded a 0 for Yes and a 1 for No. Adding factors A and B, supply ratings range from 1 to 6:

- **1:** Supply not required, substitute available
- **2:** Supply not required, substitute not available
- **3:** Supply beneficial, substitute available
- **4:** Supply beneficial, substitute not available
- **5:** Supply required, substitute available
- **6:** Supply required, substitute not available

(U) These criticality codes are useful to military planners and logisticians in determining whether the medical materiel in an inventory is adequate for treating the expected patient stream. NHRC has completed criticality codes for the Triage/SST functional area of the Surgical Company and is working on developing criticality codes for other functional areas and levels of care.

Recommendations (U)

(U) To get optimal results from the ESP estimating supplies capability, follow the guidelines below:

- Select PC codes that are likely to reflect your expected patient stream.
- Select quantities of patients that are reasonable for your mission or exercise.
- Select functional areas that provide treatment for the patient stream you input. For example, if you select the Surgical Company Operating Room as your functional area but you input a patient stream that consists of disease PCs, the estimates will not be indicative of the supplies needed to actually treat those patients.

(U) It is also important to remember that ESP is *estimation* software. Keep in mind that the number and variety of patients will almost never be exactly what was used during planning. One way to plan for a certain number of unexpected patients is to use larger numbers of patients rather than a smaller

number. This strategy ensures that a variety of supplies are represented in the ESP reports.

References (U)

1. Emens-Hesslink KE, Galarneau MR, Lowe DJ, Konoske PJ. Development of a Medical Supply Set for Corpsmen in the Field. San Diego, Calif: Naval Health Research Center; 1998. NHRC Tech. Rep. No. 98-26.
 2. Galarneau MR, Mahoney KJ, Konoske PJ, Emens-Hesslink KE. Development of a Model for Predicting Medical Supply Requirements at the Forward Echelons of Care: Preliminary Findings for Echelon II Laboratory and X-Ray Ancillaries. San Diego, Calif: Naval Health Research Center; 1997. NHRC Tech. Rep. No. 97-3.
 3. Galarneau MR, Konoske PJ, Emens-Hesslink KE, Pang G, Gauker E. Model for Predicting Medical Supply Requirements at the Forward Echelons of Care: Findings for the Battalion Aid Station. San Diego, Calif: Naval Health Research Center; 1997. NHRC Tech. Rep. No. 97-28.
 4. Galarneau MR, Konoske PJ, Emens-Hesslink KE, Pang G. Reducing the Logistical Footprint of Forward Resuscitative Surgical Units Using a Patient-Driven Model of Clinical Events. San Diego, Calif: Naval Health Research Center; 1998. NHRC Tech. Rep. No. 98-1.
 5. Galarneau MR, Pang G, Konoske P, Gauker E. Using a Model of Clinical Events to Determine Supply Requirements for Marine Corps Shock Surgical Team/Triage (SST) and Acute Care Ward Units. San Diego, Calif: Naval Health Research Center; 1998. NHRC Tech. Rep. No. 98-15.
 6. Galarneau MR, Konoske PJ, Pang G, Alvarez E. Establishing Materiel Clinical Requirements for Shipboard Trauma Care. San Diego, Calif: Naval Health Research Center; 1999. NHRC Tech. Rep. No. 99-18.
 7. Galarneau, MR, Konoske, PJ, & Pang, G. Projecting Medical Supply Requirements for a Far-Forward Resuscitative Surgery System. San Diego, Calif: Naval Health Research Center; 1999. NHRC Tech. Rep. No. 99-29.
 8. Gauker ED, Galarneau MR, Konoske PJ. Evaluation of Pharmacy Supplies as a Function of Surgical Company Clinical Requirements. San Diego, Calif: Naval Health Research Center; 1999. NHRC Tech. Rep. No. 99-9.
 9. Konoske, PJ, Galarneau, MR, Pang, G, Emens-Hesslink, K, Gauker, E, & Tropeano, A. Estimating Supply Requirements for Forward Medical Treatment Facilities. *Military Medicine*. 2000; 165:829-834.
 10. Tropeano, A & Konoske, P. Estimating Supplies Program Version 2.00: User's Guide. San Diego, Calif: Naval Health Research Center; 2002. NHRC Tech. Doc. No. 02-1A.
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Appendix A – NHRC Supply Review Process (U)

(U) The NHRC supply review process produces PC-task-supply profiles that outline the tasks and supplies necessary to treat each injury and disease in far-forward Marine Corps environments. The example below shows one PC-task-supply profile of PC 083, Injury Lung Closed (Blast Crush) With Pneumothorax Severe — One Lung With Pulmonary Contusion and Acute Severe Respiratory Distress when treated at the Battalion Aid Station (BAS). The example lists the 13 supplies required to insert a chest tube.

PC-task-supply profile of PC 083: Injury Lung Closed (Blast Crush) With Pneumothorax Severe — One Lung With Pulmonary Contusion and Acute Severe Respiratory Distress. (U)

PC Code	Area of Care	Task Performed	% Patients	Supplies Required
001	First Responder	Triage	100	Adhesive Tape Surgical Porous Woven 1"
002	BAS	Expose Patient for Exam	100	Blade Surg Knife Det No. 10 Sm Tang
003		Assessment and Evaluation of Patient Status	100	Dressing First Aid Field Cam 7.75-8.25"
004	Surgical Company	Suction (Oral/Trach/Endo)	80	Forceps Hemo Rochester-Pean Qtr-Curved
005		O ₂ Administration Setup	100	Handle Surgical Knife Detach Blade Sz 3
006	Triage/SST	O ₂ Administration Continuous (Nasal/Mask)	100	Holder Suture Needle Brown Serrated Jaw
007		BVM Setup	80	Lubricant Surgical 4 OZ
008	X-Ray	Maintain on BVM	80	Povidone Pad Prep 3 x 3"
009		Insert Chest Tube	80	Scissors Gen Surg Mayo Crvd 6.5-7" Blade
010	OR	Setup Drainage Bottles/Pleurevac	80	Suture Nonabs Sz 0 2.25" Ndl FSL Silk
011		Start/Change IV Infusion Site	80	Towel Pack Surg Blue/Gry or Grn
012	Ward-ICU	IV Infusion, Change Bottle (Maintain)	80	Tube Drainage Surg C18 Thoracic 36FR
013		Vital Signs	100	Valve Surg Drain Heimlich 4.5"
014	Ward-General	Intubation	80	
015		Needle Thoracostomy	20	
016	Lab	Pericardiocentesis	5	
017		Bowel Sounds Assess	100	
018	Pharmacy	Administer Appropriate Medication	100	
019		Cardio Arrest Resuscitation	4	
020		Morgue Care	4	
021		Order and Document Appropriate Meds/Treatment	100	
022		Prepare for Evac Ground/Air	96	
023		Assemble Material/Clean Up	100	

Appendix B – List of PC Codes in ESP (U)

PC Code	PC Description
001	Cerebral Concussion Closed With/without Nondepressed Linear Skull Fracture Severe - Loss Of Consciousness From 2 To 12 Hours
002	Cerebral Concussion Closed With/without Nondepressed Linear Skull Fracture Moderate - Loss Of Consciousness Less Than 2 Hours
003	Cerebral Contusion Closed With/without Nondepressed Linear Skull Fracture Severe - Loss Of Consciousness Greater Than 24 Hours With Focal Neurological Deficit
004	Cerebral Contusion Closed With/without Nondepressed Linear Skull Fracture Moderate - Loss Of Consciousness From 12-24 Hours Without Focal Neurological Deficit
005	Cerebral Contusion Closed With Intracranial Hematoma With/without Non- Depressed Linear Skull Fracture - Severe - Large Hematoma (including Epidural Hematoma) With Rapidly Deteriorating Comatose Patient
006	Cerebral Contusion Closed With Nondepressed Linear Skull Fracture Severe - Loss Of Consciousness Greater Than 24 Hours With/without Focal Neurological Deficit
007	Cerebral Contusion Closed With Depressed Skull Fracture Severe - With Associated Intracerebral Hematoma And/or Massive Depression
008	Cerebral Contusion Closed With Depressed Skull Fracture Moderate - No Associated Hematoma Or Significant Effect From Depression
009	Cerebral Contusion With Open Skull Fracture Severe - With Intracranial Fragments And/or Depressed Skull Fracture; Eyelid And Eyeball Laceration With Retained Intraocular Foreign Body
010	Cerebral Contusion With Open Skull Fracture Moderate - Without Intracranial Fragments And/or Depressed Skull Fracture
011	Intracranial Hemorrhage Spontaneous Nontraumatic All Cases
012	Not Assigned
013	Wound Scalp Open Without Cerebral Injury Or Skull Fracture Severe - Scalped With Avulsion Of Tissue
014	Wound Scalp Open Without Cerebral Injury Or Skull Fracture Moderate - Scalp Laceration
015	Fracture Facial Bones Closed Exclusive Of Mandible Severe - Multiple Fractures
016	Fracture Facial Bones Closed Exclusive Of Mandible Moderate - Single Fracture
017	Wound Face Jaws And Neck Open Lacerated With Associated Fractures Excluding Spinal Fractures Severe - With Airway Obstruction
018	Wound Face Jaws And Neck Open Lacerated With Associated Fractures Excluding Spinal Fractures Moderate - Without Airway Obstruction; Eyelid And Eyeball Laceration With Retained Intraocular Foreign Body
019	Wound Face And Neck Open Lacerated Contused Without Fractures Severe - With Airway Obstructions And/or Major Vessel Involvement
020	Wound Face And Neck Open Lacerated Contused Without Fractures Moderate - Without Airway Obstruction Or Major Vessel Involvement
021	Eye Wound Severe - Loss Of Intraocular Fluid With/without Retinal Detachment, With Severe Lid Laceration, Eye Not Salvageable.
022	Eye Wound Lacerated Moderate - Without Retinal Detachment Or Retinal Injury No Foreign Body Retained Without Loss Of Vitreous Fluid Patient Has Hyphema Eye Salvageable
023	Hearing Impairment Severe
024	Hearing Impairment Moderate
025	Fracture Spine Closed Without Cord Damage Unstable Lesion
026	Fracture Spine Closed Without Cord Damage Stable Lesion

PC Code	PC Description
027	Fracture Spine Closed With Cord Damage Cervical Spine With Respiratory Involvement
028	Fracture Spine Closed With Cord Damage Below Cervical Spine (progressive)
029	Fracture Spine Open With Cord Damage Cervical Spine With Respiratory Distress
030	Fracture Spine Open With Cord Damage Below Cervical Spine (progressive)
031	Intervertebral Disc Disorders With Nerve Root Compression Resistant To Bed Rest/traction
032	Intervertebral Disc Disorders With Nerve Root Compression Responding To Bed Rest/traction
033	Strains And Sprains Sacroiliac Region Severe - Non-ambulatory
034	Strains And Sprains Sacroiliac Region Moderate - Ambulatory
035	Burn Thermal Superficial Head And Neck Greater Than 5% But Less Than 10% Of Total Body Area And/or Eye Involvement
036	Burn Thermal Superficial Head And Neck Less Than 5% Of Total Body Area And No Eye Involvement
037	Burn Thermal Partial Thickness Head And Neck Greater Than 5% But Less Than 10% Of Total Body Area And/or Eye Involvement
038	Burn Thermal Partial Thickness Head And Neck Less Than 5% Of Total Body Area And No Eye Involvement
039	Burn Thermal Full Thickness Head And Neck Greater Than 5% But Less Than 10% Of Total Body Area With Eye Involvement
040	Burn Thermal Full Thickness Head And Neck Less Than 5% Of Total Body Area And No Eye Involvement
041	Fracture Clavicle Closed All Cases
042	Wound Shoulder Girdle Open With Bone Injury Severe - Joint Involvement
043	Wound Shoulder Girdle Open With Bone Injury Moderate - No Joint Involvement
044	Fracture Humerus Closed Upper Shaft All Cases
045	Wound Upper Arm Open Penetrating Lacerated Without Fracture Severe - With Nerve And/or Vascular Injury
046	Wound Upper Arm Open Penetrating Lacerated Without Fracture Moderate - Without Nerve Or Vascular Injury
047	Wound Upper Arm Open With Fractures And Nerve And Vascular Injury Arm Non-salvageable
048	Wound Upper Arm Open With Fractures And Nerve Injury No Vascular Injury Arm Salvageable
049	Fracture Radius And Ulna Closed Severe - Shafts Of Bones
050	Fracture Radius And Ulna Closed Moderate - Colles Fracture
051	Wound Forearm Open Lacerated Penetrating Without Bone Nerve Or Vascular Injury With Major Loss Of Muscle Tissue Severe - Requiring Major Debridement
052	Wound Forearm Open Lacerated Penetrating Without Bone Nerve Or Vascular Injury Moderate - Not Requiring Major Debridement
053	Wound Forearm Open Lacerated Penetrating With Fracture And With Nerve And Vascular Injury Forearm Not Salvageable
054	Wound Forearm Open Lacerated Penetrating With Fracture And With Nerve And Vascular Injury Forearm Salvageable
055	Fracture Hand Or Fingers Closed Severe - Requiring Open Reduction
056	Fracture Hand And/or Fingers Closed Moderate - Not Requiring Closed Reduction
057	Wound Hand And/or Fingers Open Lacerated Without Fractures Severe - Superficial And Deep Tendon Involvement
058	Wound Hand And/or Fingers Open Lacerated Without Fractures Moderate - No Tendon Involvement Or Limited To Sublimis Tendon Involvement
059	Wound Hand Open Lacerated Contused Crushed With Fracture(s) All Cases - Involving Fractures Of Carpals And/or Metacarpals
060	Wound Fingers Open Lacerated Contused Crushed With Fracture(s) Of Phalangeals Requiring Rehabilitation
061	Crush Injury Upper Extremity Severe - Limb Not Salvageable
062	Crush Injury Upper Extremity Moderate - Limb Salvageable

PC Code	PC Description
063	Not Assigned
064	Dislocation Shoulder Closed All Cases
065	Dislocation/fracture Elbow Closed Acute All Cases
066	Not Assigned
067	Dislocation Hand Or Wrist Closed Acute
068	Dislocation Fingers Closed Acute
069	Amputation Hand Traumatic Complete All Cases
070	Amputation Forearm Traumatic Complete All Cases
071	Amputation Full Arm Traumatic Complete All Cases
072	Sprain Wrist Closed Acute All Cases
073	Sprain Thumb Closed Acute Severe
074	Sprain Fingers Closed Acute Moderate - No Thumb Involvement
075	Burn Thermal Superficial Upper Extremities Greater Than 10% But Less Than 20% Of Total Body Area Involved
076	Burn Thermal Superficial Upper Extremity Less Than 10% Of Total Body Area Involved
077	Burn Thermal Partial Thickness Upper Extremities Greater Than 10% But Less Than 20% Of Total Body Area Involved
078	Burn Thermal Partial Thickness Upper Extremity Less Than 10% Of Total Body Area Involved
079	Burn Thermal Full Thickness Upper Extremities Greater Than 10% But Less Than 20% Of Total Body Area Involved
080	Burn Thermal Full Thickness Upper Extremity Less Than 10% Of Total Body Area Involved
081	Fracture Ribs Closed Severe - Multiple Fractures
082	Fracture Rib(s) Closed Moderate
083	Injury Lung Closed (blast Crush) With Pneumothorax Severe - One Lung With Pulmonary Contusion And Acute Severe Respiratory Distress
084	Injury Lung Closed (blast Crush) With Pneumothorax Moderate - One Lung With Pulmonary Contusion And Respiratory Distress
085	Wound Thorax (anterior Or Posterior) Open Superficial Lacerated Contused Abraded Avulsed Requiring Major Debridement
086	Wound Thorax (anterior Or Posterior) Open Superficial Lacerated Contused Abraded Avulsed Not Requiring Major Debridement
087	Wound Thorax (anterior Or Posterior) Open Penetrating With Associated Rib Fractures And Pneumothorax Acute Severe Respiratory Distress
088	Wound Thorax (anterior Or Posterior) Open Penetrating With Associated Rib Fractures And Pneumothorax Moderate Respiratory Distress
089	Not Assigned
090	Burn Thermal Superficial Trunk Greater Than 20% But Less Than 30% Of Total Body Area Involved
091	Burn Thermal Superficial Trunk Greater Than 10% But Less Than 20% Of Total Body Area Involved
092	Burn Thermal Partial Thickness Trunk Greater Than 20% But Less Than 30% Of Total Body Area Involved
093	Burn Thermal Partial Thickness Trunk Greater Than 10% But Less Than 20% Of Total Body Area Involved
094	Burn Thermal Full Thickness Trunk Greater Than 20% But Less Than 30% Of Total Body Area Involved
095	Burn Thermal Full Thickness Trunk Greater Than 10% But Less Than 20% Of Total Body Area Involved
096	Wound Abdominal Wall (anterior Or Posterior) Lacerated Abraded Contused Avulsed Without Entering Abdominal Cavity Severe - Requiring Major Debridement
097	Wound Abdominal Wall (anterior Or Posterior) Lacerated Abraded Contused Avulsed Without Entering Abdominal Cavity Not Requiring Major Debridement

PC Code	PC Description
098	Wound Liver Closed Acute (crush Fracture) Major Liver Damage
099	Wound Liver Closed Acute (crush Fracture) Minor Liver Damage
100	Wound Spleen Closed Acute (crush Fracture) All Cases
101	Wound Abdominal Cavity Open With Lacerating Penetrating Perforating Wound To The Large Bowel
102	Wound Abdominal Cavity Open With Lacerating Penetrating Perforating Wound To Small Bowel Without Major Or Multiple Resections
103	Wound Abdominal Cavity Open With Penetrating Perforating Wound Of Liver Major Damage
104	Wound Abdominal Cavity Open With Penetrating Perforating Abdominal Wound With Lacerated Liver
105	Wound Abdominal Cavity Open With Penetrating Perforating Wound Of Spleen
106	Wound Abdominal Cavity Open With Lacerated Penetrated Preforated Wound With Shattered Kidney
107	Wound Abdominal Cavity Open With Lacerated Penetrating Perforating Wound With Lacerated Kidney Initially Repaired But Subsequent Nephrectomy
108	Wound Abdominal Cavity Open With Lacerated Penetrating Perforating Wound With Shattered Bladder
109	Wound Abdominal Cavity Open With Lacerated Penetrating Perforating Wound With Lacerated Bladder
110	Wound Buttocks Severe - Open Lacerated Penetrating Perforating And Avulsed
111	Wound Buttocks Moderate - Open Lacerated Contused And Abraded
112	Displaced Fracture Of Pelvis Closed With Associated Soft Tissue Damage And Pelvic Organ Damage
113	Non-displaced Fracture Of Pelvis Closed With Associated Soft Tissue Damage
114	Wound Abdomen Open With Pelvic Fracture And Penetrating Perforating Wounds To Multiple Pelvic Structures (male Or Female)
115	Wound Abdomen Open With Pelvic Fracture And Penetrating Perforating Wounds To Pelvic Colon Only (male Or Female)
116	Wound External Genitalia Male Severe - Lacerated Avulsed Crushed
117	Wound External Genitalia Male Moderate - Abraded And Contused
118	Wound External Genitalia Female Severe - Lacerated Avulsed Crushed
119	Wound External Genitalia Female Moderate - Abraded Contused
120	Fracture Closed Femur Shaft All Cases
121	Wound Thigh Open Without Fracture Nerve Or Vascular Injury Requiring Major Debridement
122	Wound Thigh Open Without Fracture Nerve Or Vascular Injury Not Requiring Major Debridement
123	Wound Thigh Open Lacerated Penetrating Perforating With Fracture And Nerve/vascular Injury Limb Not Salvageable
124	Wound Thigh Open Lacerated Penetrating Perforating With Fracture And Nerve And/or Vascular Injury Limb Salvageable
125	Wound Knee Open Lacerated Penetrating Perforating With Joint Space Penetration Shattered Knee
126	Wound Knee Open Lacerated Penetrating Perforating With Joint Space Penetration Articular Cartilage Damage No Bone Injury
127	Fracture Closed Tibia And Fibula Shaft All Cases
128	Wound Lower Leg Open Lacerated Penetrating Perforating Without Fractures Requiring Major Debridement
129	Wound Lower Leg Open Lacerated Penetrating Perforating Without Fractures Not Requiring Major Debridement
130	Wound Lower Leg Open Lacerated Penetrating Perforating With Fracture And Nerve/vascular Injury Limb Not Salvageable
131	Wound Lower Leg Open Lacerated Penetrating Perforating With Fracture And Nerve And/or Vascular Injury Limb Salvageable
132	Fracture Ankle/foot Closed Displaced Requiring Reduction
133	Fracture Ankle/foot Closed Nondisplaced Not Requiring Reduction

PC Code	PC Description
134	Wound Ankle Foot Toes Open Lacerated Contused Without Fractures But Requiring Major Debridement
135	Wound Ankle Foot Toes Open Lacerated Contused Without Fractures Not Requiring Major Debridement
136	Wound Ankle Foot Toes Open Penetrating Perforating With Fractures And Nerve/vascular Injury Limb Not Salvageable
137	Wound Ankle Foot Toes Open Penetrating Perforating With Fractures And Nerve And/or Vascular Injury Limb Salvageable
138	Crush Injury Lower Extremity Limb Not Salvageable
139	Crush Injury Lower Extremity Limb Salvageable
140	Dislocation Hip Closed Acute All Cases
141	Tear Ligaments Knee Acute Complete Rupture
142	Tear Ligaments Knee Acute Incomplete Rupture
143	Dislocation Toes Closed Acute All Cases
144	Amputation Foot Traumatic Complete All Cases
145	Amputation Below Knee Traumatic Complete All Cases
146	Amputation Traumatic Complete Requiring Hip Disarticulation
147	Amputation Above Knee Traumatic Complete
148	Sprain Ankle Closed Acute With Complete Ligament Rupture
149	Sprain Ankle Closed Acute Grade 2 Incomplete Ligament Rupture
150	Burn Thermal Superficial Lower Extremities And Genitalia Greater Than 30% But Less Than 40% Of Total Body Area Involved
151	Burn Thermal Superficial Lower Extremity And Genitalia Greater Than 15% But Less Than 30% Of Total Body Area Involved
152	Burn Thermal Partial Thickness Lower Extremities And Genitalia Greater Than 30% But Less Than 40% Of Total Body Area Involved
153	Burn Thermal Partial Thickness Lower Extremity And Genitalia Greater Than 15% But Less Than 30% Of Total Body Area Involved
154	Burn Thermal Full Thickness Lower Extremities And Genitalia Greater Than 30% But Less Than 40% Of Total Body Area Involved
155	Burn Thermal Full Thickness Lower Extremity And Genitalia Greater Than 15% But Less Than 30% Of Total Body Area Involved
156	Blisters Hand Fingers Foot Toes Due To Friction Acute Moderate - All Cases
157	Insect Bites And Stings (unspecified Body Area) With Systemic Symptoms And/or Respiratory Difficulty
158	Bites And Stings (unspecified Body Area) Moderate - Localized Symptoms
159	Miw Brain And Chest With Sucking Chest Wound And Pneumothorax
160	Miw Brain And Abdomen With Penetrating Perforating Wound Colon
161	Miw Brain And Abdomen With Penetrating Perforating Wound Kidney
162	Miw Brain And Abdomen With Penetrating Perforating Wound Bladder
163	Miw Brain And Abdomen With Shock And Penetrating Perforating Wound Spleen
164	Miw Brain And Abdomen With Shock And Penetrating Perforating Wound Liver
165	Miw Brain And Lower Limbs Requiring Bilateral Above Knee Amputations
166	Miw Chest With Pneumothorax And Abdomen With Penetrating Wound Colon
167	Miw Chest With Pneumothorax And Abdomen With Penetrating Perforating Wound Kidney
168	Miw Chest With Pneumothorax And Abdomen With Perforating Wound Bladder
169	Miw Chest With Pneumothorax And Abdomen With Penetrating Perforating Wound Spleen
170	Miw Chest With Pneumothorax And Abdomen With Penetrating Perforating Wound Liver

PC Code	PC Description
171	Miw Chest With Pneumohemothorax And Limbs With Fracture And Vascular Injury
172	Miw Abdomen With Penetrating Perforating Wound Of Colon And Bladder
173	Miw Abdomen With Penetrating Perforating Wound Of Colon And Spleen
174	Miw Abdomen With Penetrating Perforating Wound Of Colon And Liver
175	Miw Abdomen And Limbs With Penetrating Perforating Wound Of Colon And Open Fracture And Neurovascular Injury Of Salvageable Lower Limb
176	Miw Abdomen And Pelvis With Penetrating Perforating Wound Of Liver And Kidney
177	Miw Abdomen And Pelvis With Penetrating Perforating Wounds Of Spleen And Bladder
178	Miw Abdomen Pelvis Limbs With Fracture And Neurovascular Injury Limb Salvageable And Penetrating Wound Kidney
179	Miw Abdomen Pelvis Limbs Without Fracture Or Neurovascular Injury And Penetrating Perforating Wound Bladder
180	Miw Abdomen And Lower Limbs With Fracture And Nerve Injury With Penetrating Wound Of Spleen With Full Thickness Burns To Greater Than 20% Of Tbsa
181	Miw Abdomen And Limbs Without Fracture Or Nerve Injury With Penetrating Wound Of Liver
182	Miw Chest With Pneumohemothorax Soft Tissue Injury To Upper Limbs And Penetrating Wound Of Brain
183	Miw Chest With Pneumohemothorax Soft Tissue Injury To Upper Limbs And Abdomen With Wound Of Colon
184	Miw Chest With Pneumohemothorax Pelvis And Abdomen With Wound Of Colon And Bladder
185	Miw Abdomen And Chest With Multiple Organ Damage
186	Multiple Nonperforating Fragment Wounds Of Skin And Soft Tissue
187	Trench Foot Immersion Foot Severe - Vesicle Formation
188	Trench Foot Immersion Foot Moderate - No Vesicle Formation
189	Not Assigned
190	Frostbite Full Skin Thickness Or Deeper Involvement
191	Frostbite Less Than Full Skin Thickness
192	Hypothermia All Cases
193	Heat Stroke
194	Heat Exhaustion
195	Heat Cramps All Cases
196	Appendicitis Acute With Perforation Rupture Peritonitis
197	Appendicitis Acute Without Perforation Rupture Peritonitis
198	Inguinal Hernia Complicated Direct Or Indirect Sliding Incarceration Of Bowel
199	Inguinal Hernia Uncomplicated Direct Or Indirect No Sliding No Incarceration Of Bowel Or Bladder
200	Internal Derangement Of Knee Chronic With Torn Meniscus And/or Ligament Laxity
201	Strain Lumbosacral Sacroiliac Joint Chronic All Cases
202	Eczema Dermatitis Seborrheic Contact Others Affecting Weight Bearing Or Pressure Areas
203	Eczema Dermatitis Seborrheic Contact Others Not Affecting Weight Bearing Areas
204	Boils Furuncles Pyoderma Requiring Surgery
205	Boils Furuncles Pyoderma All Other Cases Calluses Corns Folliculitis Erythrasma
206	Cellulitis Involving Face Or Weight Bearing Areas

PC Code	PC Description
207	Cellulitis Other Than Face Or Weight Bearing Areas
208	Dermatophytosis Severe - Affecting Feet
209	Dermatophytosis All Other Cases (tineas/candidas/yeasts)
210	Pediculosis All Cases
211	Scabies All Cases
212	Pilonidal Cyst/abscess Requiring Major Excision
213	Cyst/abscess Allcases Including Minor Incision
214	Ingrown Toenails Bilateral With Secondary Infections Unresolvable At Echelon 2
215	Ingrown Toenails Without Secondary Infection
216	Herpes Simplex And Zoster Without Encephalitis All Types Of Viral Dermatitis
217	Not Assigned
218	Not Assigned
219	Hyperhidrosis All Cases
220	Blepharitis All Cases
221	Conjunctivitis Severe - All Cases
222	Conjunctivitis Moderate - All Cases
223	Corneal Ulcer
224	Corneal Abrasion
225	Iridocyclitis Acute Marked Visual Impairment
226	Iridocyclitis Acute Minimal Visual Impairment
227	Refraction And Accommodation Disorders Refraction Required
228	Refraction And Accommodation Disorders Replacement Of Spectacles Required
229	Otitis Externa All Cases
230	Otitis Media Acute Suppurative Including Eustacian Tubes
231	Not Assigned
232	Infections Of The Nose & Paranasal Sinuses Including Viral Rhinitis
233	Upper Respiratory Infections Acute All Cases
234	Bronchitis Acute All Cases
235	Asthma With Disabling Symptoms Or Repeated Attacks
236	Asthma Other Cases
237	Not Assigned
238	Not Assigned
239	Acute Respiratory Disease Severe
240	Acute Respiratory Disease Moderate
241	Not Assigned
242	Not Assigned
243	Food Poisoning All Organisms Disabling Symptoms

PC Code	PC Description
244	Food Poisoning All Organisms Moderate Symptoms
245	Diarrheal Disease Severe
246	Diarrheal Disease Moderate
247	Upper Gastrointestinal Hemorrhage, Gastritis Or Ulcer
248	Gastritis Acute All Cases
249	Peptic Ulcer Gastric Or Duodenal Penetrating And/or Perforating
250	Peptic Ulcer Gastric Or Duodenal Uncomplicated
251	Regional Ileitis Disabling Symptoms Unresponsive To Treatment
252	Regional Ileitis Responds To Treatment
253	Helminthic Disease Including Trichinosis Ascariasis Giardiasis Tapeworm Hookworm Pinworm
254	Not Assigned
255	Migraine All Cases
256	Hemorrhoidal Disease All Cases
257	Not Assigned
258	Severe Hypertension
259	Ischemic Heart Disease
260	Phlebitis Deep Vein Involvement
261	Not Assigned
262	Tenosynovitis Tendonitis Bursitis Epicondylitis
263	Meningo-encephalitis Uncomplicated
264	Meningo-encephalitis Complicated
265	Near Drowning Without Cervical Spine Injury Or Hypothermia All Cases
266	Toxic Inhalation Including Burn-related Respiratory Injuries Severe - All Cases
267	Not Assigned
268	White Phosphorus Burns Resultant Partial Thickness Burns < 40% Tbsa All Cases
269	Sexually Transmitted Disease, Nsu, Macupurulent, Cervicitis, Tricomonas
270	Sexually Transmitted Disease, Genital Ulcers, Adenopathy, Chancroid, Genital Herpes Simplex, Lymphogranuloma, Venereum, Syphilis
271	Sexually Transmitted Disease, Gonorrhea, Chlamydia, Septic Arthritis, Pid
272	Glomerulonephritis Acute
273	Glomerulonephritis Chronic
274	Pyelonephritis Acute Secondary To Obstruction
275	Pyelonephritis Acute No Obstruction
276	Nephrotic Syndrome/renal Failure All Cases
277	Renal/ureteral Calculus Causing Obstruction Impacted
278	Renal/ureteral Calculus Not Causing Obstruction
279	Epididymitis, Cystitis, Prostatitis, Orchitis, Including Testicular Torsion, All Cases
280	Balanoposthitis All Cases

PC Code	PC Description
281	Not Assigned
282	Infectious Mononucleosis All Cases
283	Hepatitis Infectious Viral All Cases
284	Not Assigned
285	Cholecystitis Acute With Stones/cholecystitis All Cases
286	Pancreatitis Acute All Cases
287	Cirrhosis All Cases
288	Not Assigned
289	Neoplasms Malignant
290	Neoplasms Benign
291	Abnormal Uterine Bleeding
292	Dysmenorrhea Amenorrhea
293	Pelvic Inflammatory Disease (pid) All Cases
294	Cervicitis Endocervicitis With Symptomatic Leukorrhea
295	Vulvovaginitis
296	Not Assigned
297	Tubal Pregnancy All Cases
298	Not Assigned
299	Abortion Spontaneous With Hemorrhage
300	Not Assigned
301	Psychosis
302	Conduct Disorders
303	Non-psychotic Mental Disorders
304	Stress Reaction Severe Unstable Slow Improvement
305	Stress Reaction Severe Stable Slow Improvement
306	Alcohol Dependency Syndrome Moderate
307	Alcohol Misuse Simple Intoxication
308	Drug Dependency (other Than Alcohol) Severe
309	Drug Misuse (other Than Alcohol) Mild Or Moderate
310	Stress Reaction Mild/moderate
311	Eye Wound Lacerated Penetrated With Retinal Injury Eye Salvageable
312	Wound Knee Open Lacerated Penetrating Perforating With Joint Space Penetration No Bone Or Articular Cartilage Injury
313	Wound Abdominal Cavity Open With Lacerated Penetrating Perforating Wound Kidney Moderate - Kidney Salvageable
314	Stress Reaction Severe Unstable Delayed Improvement
315	Stress Reaction Severe Unstable Persisting
316	Alcohol Dependency Severe - Impending Or Actual Dts
317	Drug Misuse (other Than Alcohol) Severe - Atypical No Dependency

PC Code	PC Description
318	Stress Reaction Severe - Rapid Improvement
319	Wound Fingers Open Lacerated Contused Crushed With Fracture(s) Of Phalangeals Not Requiring Rehabilitation
320	Dislocation/subluxation Temporomandibular Joint Without Fracture Chronic Requiring Correction
321	Dislocation/subluxation Temporomandibular Joint Without Fracture Acute Initial Injury
322	Fracture Mandible With/without Oral Laceration Without Airway Involvement Unstable Severe Requiring Open Reduction
323	Fracture Mandible With/without Oral Laceration Without Airway Involvement Mild Displacement Stable
324	Stress Reaction Severe Stable - Delayed Improvement
325	Stress Reaction Severe Stable Persisting
326	Not Assigned
327	Not Assigned
328	Animal Bites And Rabies Exposure
329	Trachoma All Cases
330	Schistosomiasis All Cases
331	Malaria Severe - All Species
332	Malaria Moderate - All Species
333	Febrile Illness Acute Severe - Except Malaria And Pneumonia
334	Febrile Illness Acute Moderate
335	Snake Bite
336	Not Assigned
337	Not Assigned
338	Not Assigned
339	Cutaneous Ulcers Including Leishmaniasis
340	Not Assigned
341	Not Assigned
342	Not Assigned
343	Not Assigned
344	Not Assigned
345	Not Assigned
346	Eye Wound Directed Energy Induced (laser) Severe Of Macula And/or Optic Nerve, With Vitreous Blood, Severe Visual Loss, One Or Both Eyes.
347	Eye Wound Directed Energy Induced (laser/rfr) Moderate To Severe, Posterior, Nonmacular, Nonoptic Nerve, Visual Loss Secondary To Vitreous Blood.
348	Eye Wound Directed Energy Induced (laser) Moderate Nonmacular, Nonoptic Nerve, No Vitreous Blood.
349	Eye Wound Directed Energy Induced (laser/rfr) Mild To Moderate, Anterior, Pain With Photophobia And Disruption Of Corneal Integrity.
350	Eye Wound Directed Energy Induced (laser/rfr) Mild Flash Blindness No Permanent Injury
351	Anthrax, Inhalation, Non-vaccinated1, Incubating, Asymptomatic
352	Anthrax, Inhalation, Non-vaccinated, Prodromal
353	Anthrax, Inhalation, Non-vaccinated, Acute

PC Code	PC Description
354	Anthrax, Inhalation, Vaccinated, Asymptomatic
355	Anthrax, Inhalation, Vaccinated, Prodromal
356	Anthrax, Inhalation, Vaccinated, Acute
357	Plague, Inhalation, Incubating, Asymptomatic
358	Plague, Inhalation, Acute
359	Plague Meningitis
360	Botulism With Respiratory Failure
361	Botulism Without Respiratory Failure
362	Staphylococcal Enterotoxin B With Respiratory Failure
363	Staphylococcal Enterotoxin B Without Respiratory Failure
364	Venezuelan Equine Encephalitis With Central Nervous System Involvement
365	Smallpox, Incubating, Asymptomatic
366	Smallpox, Symptomatic
367	Tularemia, Inhalation, Incubating Asymptomatic
368	Tularemia, Inhalation, Acute
369	Ricin, Inhalation
370	Q Fever, Inhalation, Incubating, Asymptomatic
371	Q Fever, Inhalation, Acute
382	Nerve Agent Vapor Only (inhalation) Mild
383	Nerve Agent Vapor Moderate
384	Nerve Agent Vapor Severe
385	Nerve Agent Liquid Mild
386	Nerve Agent Liquid Moderate
387	Nerve Agent Liquid Moderately Severe
388	Nerve Agent Liquid Severe
389	Wound, Lower Leg, Open, Lacerated, Penetrating, Without Fractures, Requiring Major Debridement, Moderately Contaminated With Liquid Nerve Agent
390	Nerve Agent Combined Penetrating Abdominal Wound
391	Mustard Liquid/vapor Mild
392	Mustard Liquid/vapor Moderate
393	Mustard Liquid/vapor Severe
394	Hd/lewisite Combination, Mild
395	Phosgene Oxime
396	Cyanide (ac) Inhalation, Mild
397	Cyanide (ac) Inhalation, Severe
398	Pulmonary Agent With Early (<4hours) Symptoms
399	Pulmonary Agent With Delayed (>4 Hours) Symptoms
400	Anticholinergic Incapacitating Agent

PC Code	PC Description
401	White Phosphorus Injury, Skin Exposure
501	Water Sanitation
502	Pest Control
503	Heat/cold Injury Prevention
504	Infectitious Disease Prevention
505	Food Sanitation
506	Common Area Sanitation
507	Berthing Area Sanitation
508	Waste Management
509	Force Training
510	Hearing Conservation
600	Hyphema All Cases
601	Verruca, Plantar Warts, Anal, Genital Condylomas
602	Common Dermatitis - Puritis, Uticaria
603	Smoke Inhalation
604	Electrical Shock
605	Arthritis
606	Constipation, Fecal Impaction
607	Motion Sickness, Vertigo
608	Gastroenteritis
609	Stroke
610	Diabetes
611	Acne, Sebaceous Gland Condition
612	Rickettsial Disease Including Rocky Mountain Spotted Fever, Sscrub Typhus
613	Poisoning, Including Ingestion, Inhalation, Contact
614	Decompression Sickness
615	Syncope, Vasovagal
616	Aircraft Accident Investigation (idc - Collect Blood, Urine Samples Only)
617	Urinary Tract Infection Uncomplicated
800	Acute Necrotizing Gingivitis (anug)-an Inflammation Of The Gingiva Characterized By Necrosis Of The Papillae, Ulceration Of The Gingival Margins, Appearance Of A Pseudomembrane, Pain, And A Fetid Mouth Odor
801	Alveolitis/alveolar Osteitis (localized)-infection Of An Extraction Site (dry Socket, Localized Osteitis)
802	Apical Abscess/periapical Abscess-collection Of Purulent Exudate Around The Area Of The Tooth That Surrounds The Root Tip
803	Avulsed, Mobile, Displaced Tooth-separation Or Displacement Of An Entire Tooth Structure From Its Supporting And Attaching Tissues
804	Candidiasis-fungal Infection
805	Caries No Pulp Involvement-deterioration Of Enamel By Decay That Does Not Extend To The Pulp
806	Caries Pulp Involvement-deterioration Of Enamel By Decay That Extends To The Pulp

PC Code	PC Description
807	Cellulitis-inflammation Of The Subcutaneous Tissue Caused By Group A Beta Hemolytic Streptococci
808	Crown Loose-loose Tooth Cap
809	Crown Broken/missing-broken Or Fracture Of Tooth Cap
810	Defective Restoration-deterioration, Fracture, Or Loss Of Permanent Or Temporary Non-cast Restoration
811	Dentin Hypersensitivity-a Portion Of The Protective Covering From The Hard Enamel Coating Of The Tooth Is Lost Causing The Odontoblasts To Be Exposed And Hypersensitive To Hot And Cold Substances
812	Food Impaction/foreign Body Removal-food Or Object That Is Lodged In Gums
813	Fractured Alveolar Bone-a Break In The Bone Surrounding A Tooth
814	Fractured Mandible-fracture Or Break Of The Lower Jaw
815	Fractured Maxilla-fracture Or Break Of The Upper Jaw
816	Fractured Tooth-fracture Or Break In The Tooth With Or Without The Loss Of A Portion Of The Tooth enamel Crown
817	Gingivitis-acute Or Chronic Inflammation Of The Gingiva
818	Maxillary Sinusitis-infection Of Sinus Area Accompanied By Inflammation And Drainage Conditions May Mimic Toothache
819	Occlusal Trauma-trauma To The Incisal Surface Or Occlusion Of Teeth
820	Oral Ulcers : (cold Sores, Oral Herpes, Aphthous Ulcers, Canker Sores, Vesiculo-bullous)-ulcers That Affect The Oral Cavity
821	Osseous Sequestrum-bone Splinters
822	Osteomyelitis-microbial Infection Of Bone Marrow
823	Soft Tissue Trauma, Laceration-oral Or Facial Soft Tissue Abrasion, Contusion, Or Burn
824	Pericoronitis/erupting Tooth-acute Inflammation Of Tissue Area Surrounding Tooth, Most Commonly Associated With Erupting Third Molars
825	Periodontitis/periodontal Abscess-advanced Gum Disease And Inflammation Which Causes Bone Loss Resulting In Tooth Loss If Untreated
826	Post Operative Problem-conditions Associated With Previous Operative Treatment Such As Bite Adjustment, Etc
827	Post Surgical Problem-conditions Associated With Previous Surgical Treatment Such As Swelling From Tooth Extraction, Etc
828	Prosthesis Loose-deterioration Of Adhesion Of A Fixed Or Removable Appliance That Replaces Missing Teeth (for Example Bridges, Dentures And Partial)
829	Prosthesis (broken/missing)-absence, Deterioration Defect, Or Fracture Of A Fixed Or Removable Appliance That Replaces Missing Teeth (for Example Bridges, Dentures And Partial)
830	Pulpitis (irreversible)-inflammation Of The Dental Pulp Or Nerve Associated With Throbbing Continuous Pain That Is Spontaneous That Lingers Even After The Stimulus Is Removed
831	Pulpitis (reversible)-inflammation Of The Dental Pulp Or Nerve Associated With Short Lived Pain Following Application Of Hot, Cold, Sweet, Or Biting Stimulus
832	Root Fracture-fracture Or Break In Part Of The Tooth Below The Crown
833	Medical Emergency In Chair-a Rapidly Developing Condition, Usually Acute, That Requires Immediate Medical Intervention. Can Include Anaphylaxis, Syncope, Heart Attack, Aspiration, Anaphalatic Shock, Etc.
834	Preventive Care - Annual Exam Provided To Prevent Deterioration Of Dental Health.
900	Water Sanitation (FL)
901	Pest Control (FL)
902	Heat/cold Injury Prevention (FL)
903	Communicable Disease Intervention (FL)

PC Code	PC Description
904	Food Sanitation (FL)
905	Common Area Sanitation (FL)
906	Berthing Area Sanitation (FL)
907	Waste Management (FL)
908	Force Training (FL)
909	Hearing Conservation (FL)
910	Physical Exam (FL)
950	Water Sanitation (MC)
951	Pest Control (MC)
952	Heat/cold Injury Prevention (MC)
953	Communicable Disease Control (MC)
954	Food Sanitation (MC)
955	Common Area Sanitation (MC)
956	Berthing Sanitation (MC)
957	Waste Management (MC)
958	Conduct Training (MC)

REPORT DOCUMENTATION PAGE

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14. ABSTRACT (maximum 200 words) Naval Health Research Center developed the Estimating Supplies Program (ESP) as a decision tool for medical planners, providers, logisticians, and trainers that calculates the amount of supplies required to treat a specific patient stream and assesses inventory readiness. The purpose of this document is to explain the program methodology, algorithms, and calculations that ESP uses to estimate medical supplies and evaluate inventory readiness. Sample reports for both the estimating supplies and the inventory readiness capabilities are included to provide a concrete demonstration of ESP capabilities. To demonstrate the estimating supplies capability, two different patient streams were run through the same functional area. A comparison of the supply differences was then drawn out to show an explicit connection to the difference in the patient streams. To demonstrate the inventory readiness assessment capability, an inventory was built. Certain supply item quantities were changed and a comparison was made between the S ratings, a measure calculated to indicate the percentage of supplies on hand.					
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